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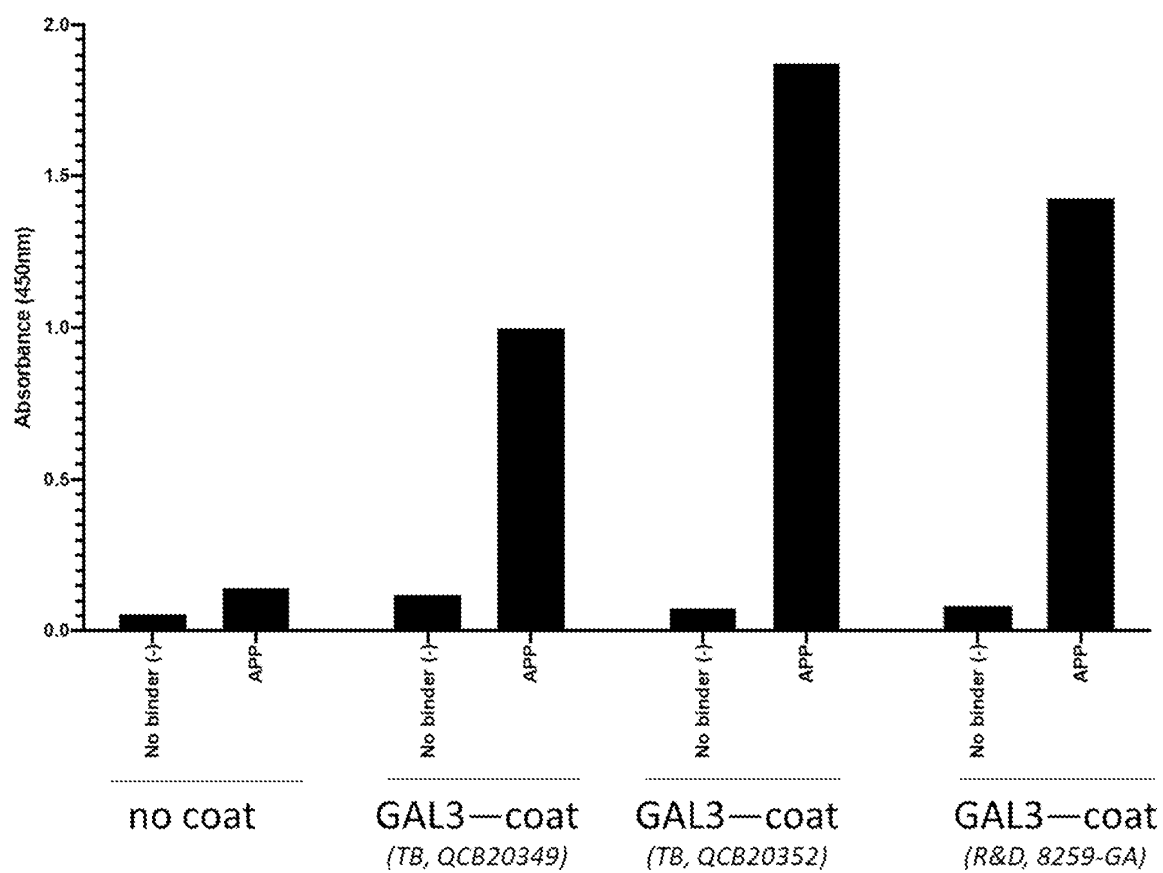


FIG. 1

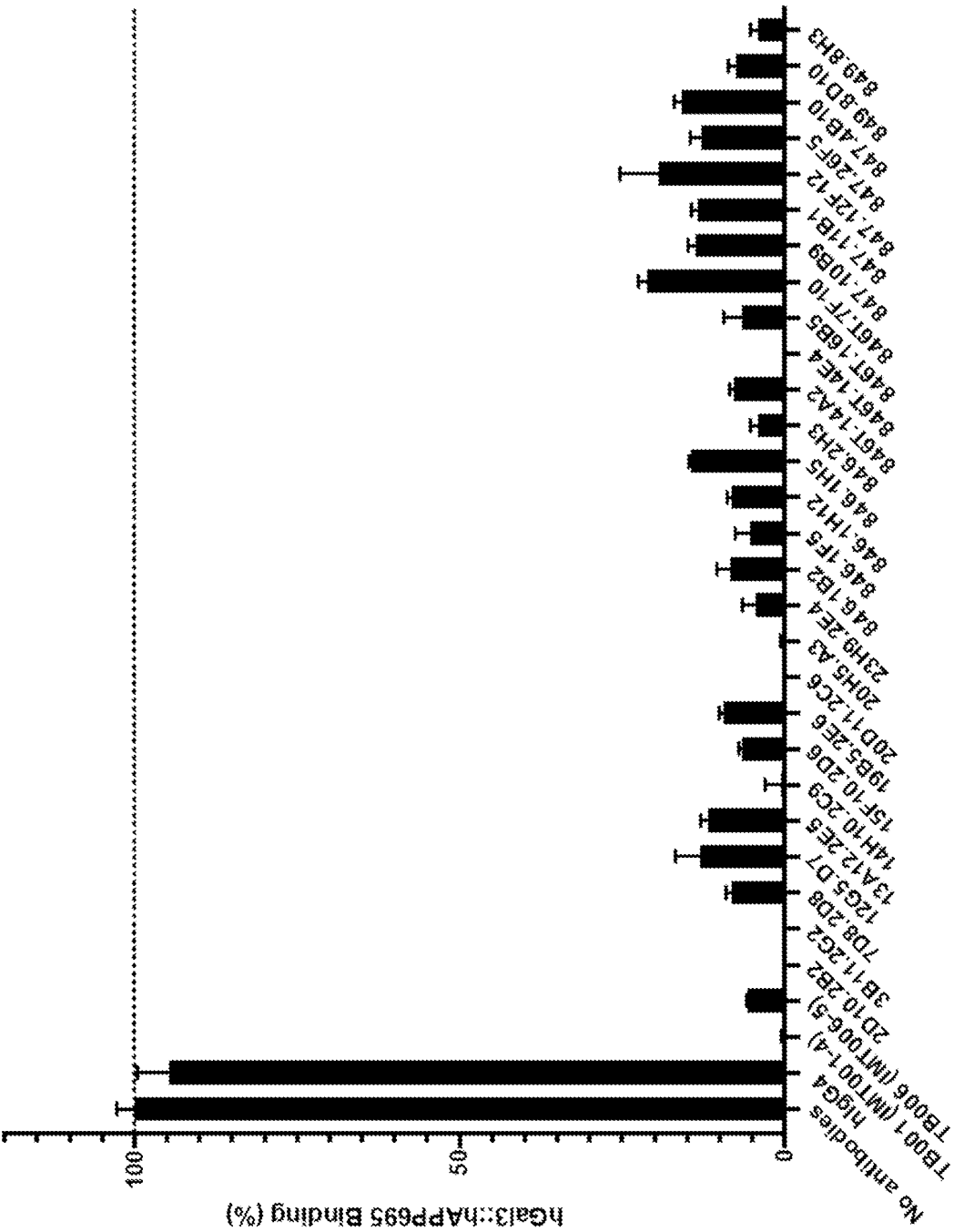


FIG. 2

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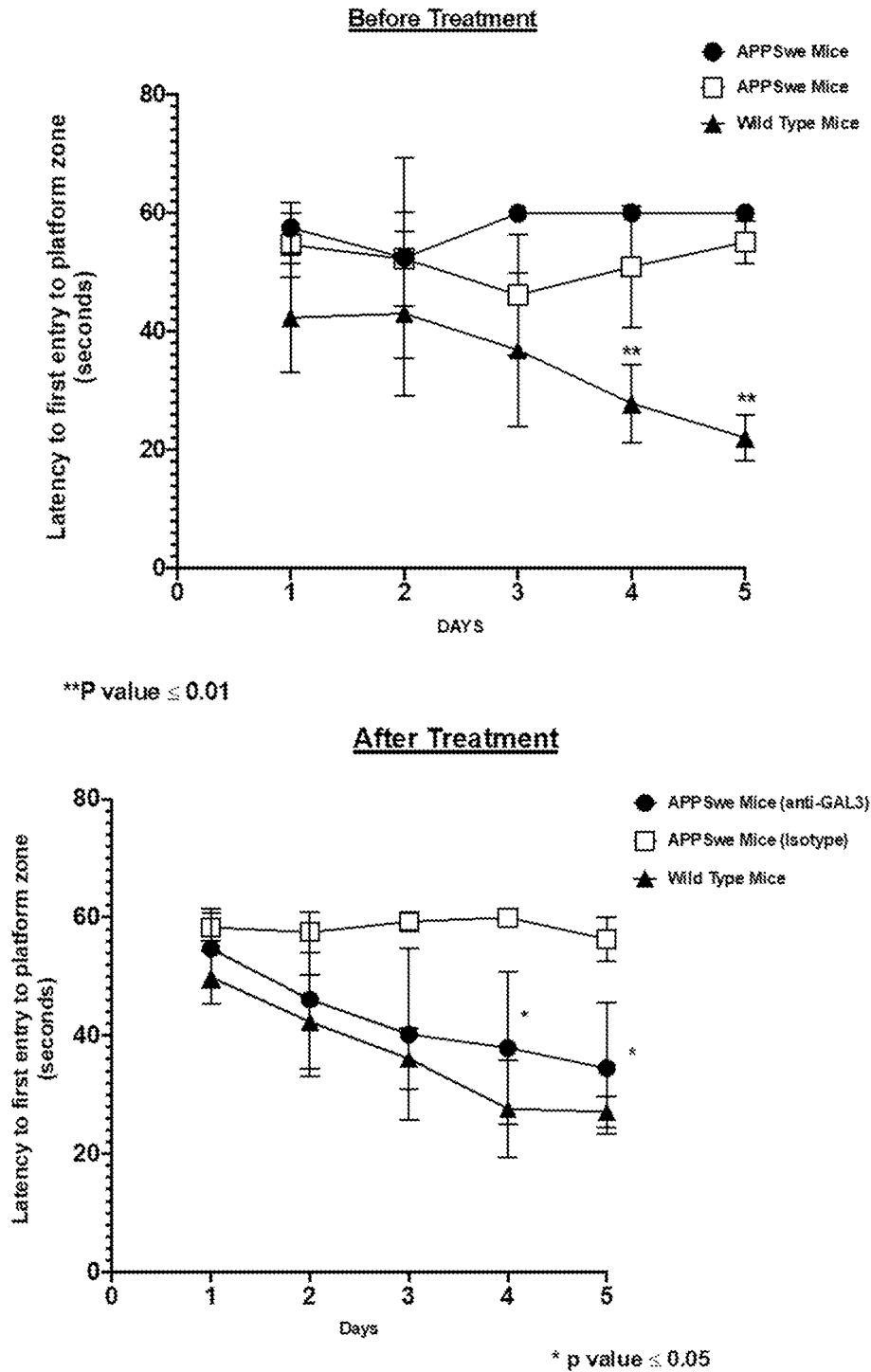


FIG. 3

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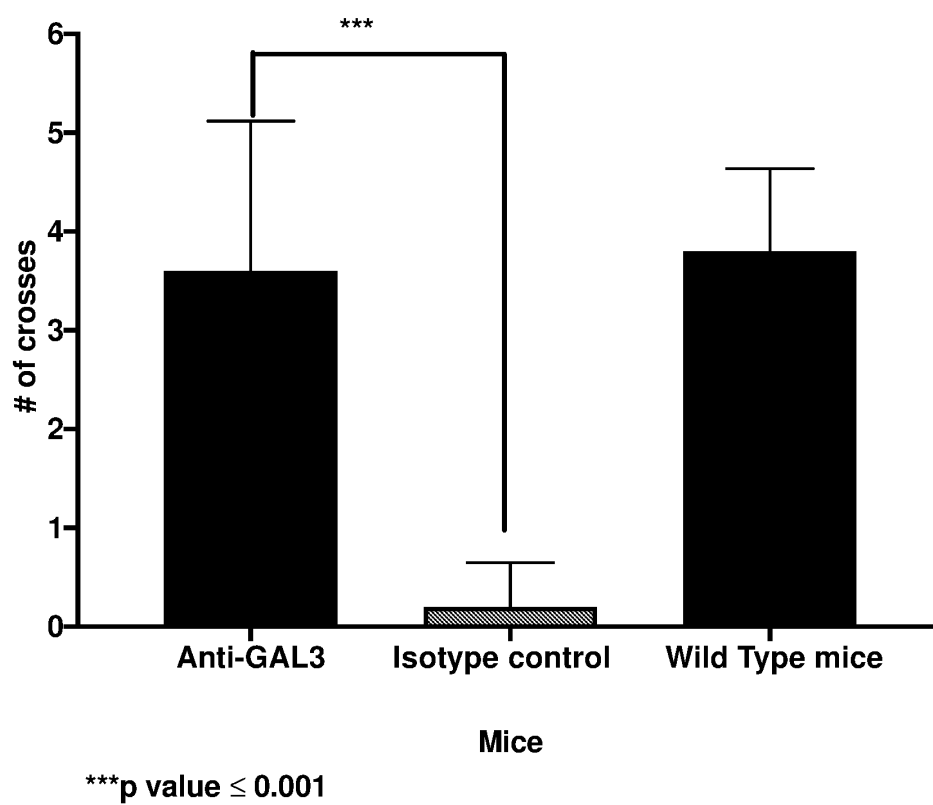
Retention of Memory after 24 hrs

FIG. 4

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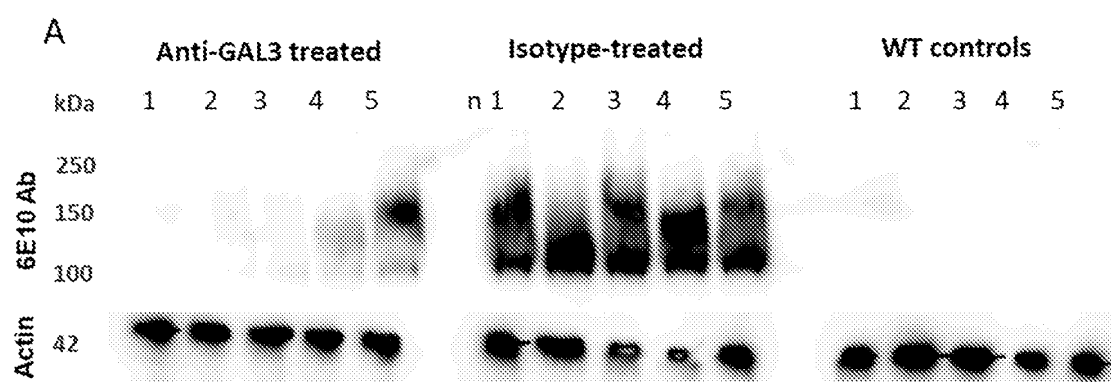


FIG. 5A

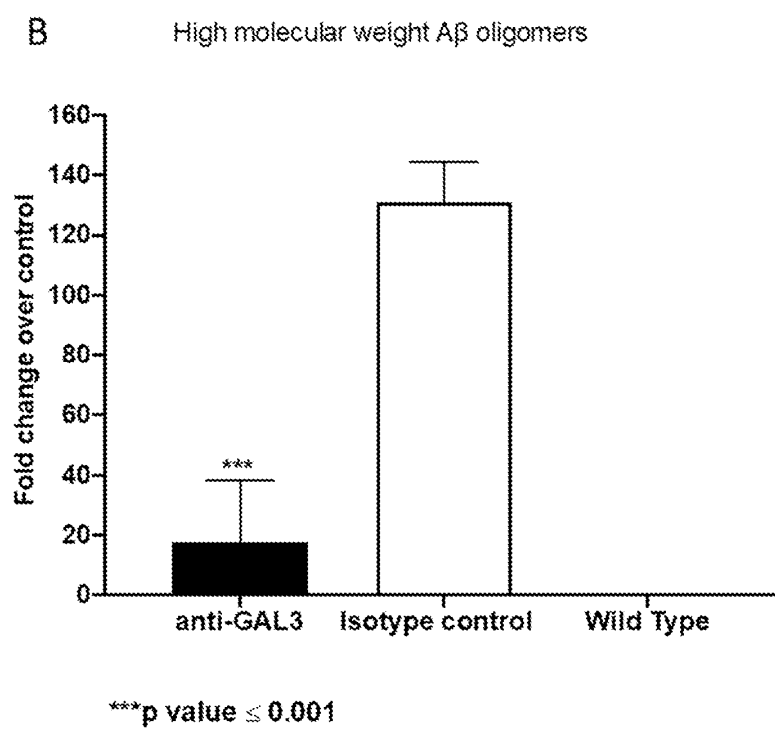
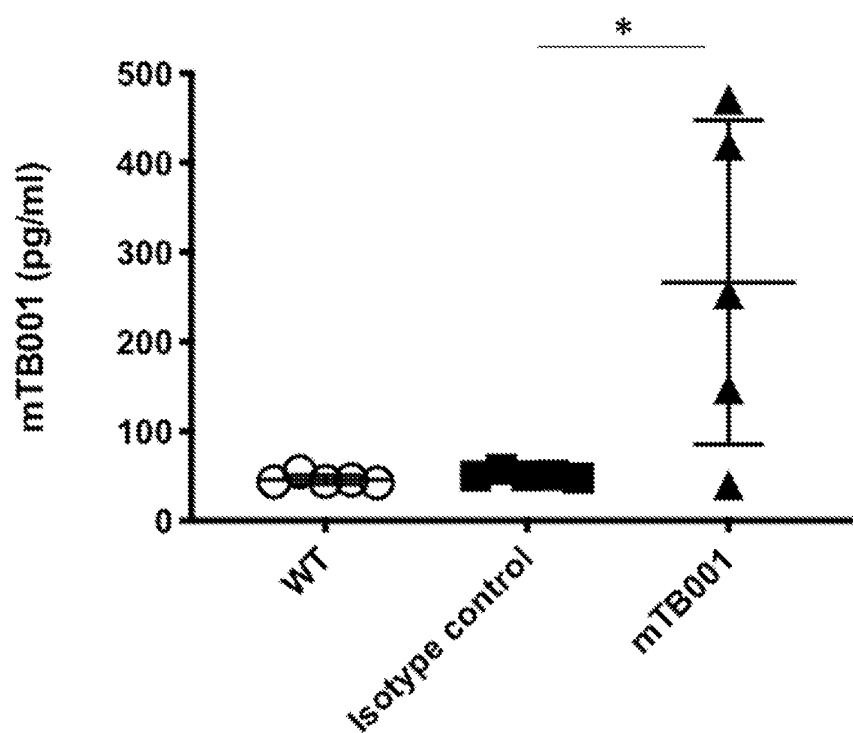


FIG. 5B

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* p value ≤ 0.05 (Unpaired T test)

FIG. 5C

Morris water maze test on Abeta42-injected animals

pre-Treatment

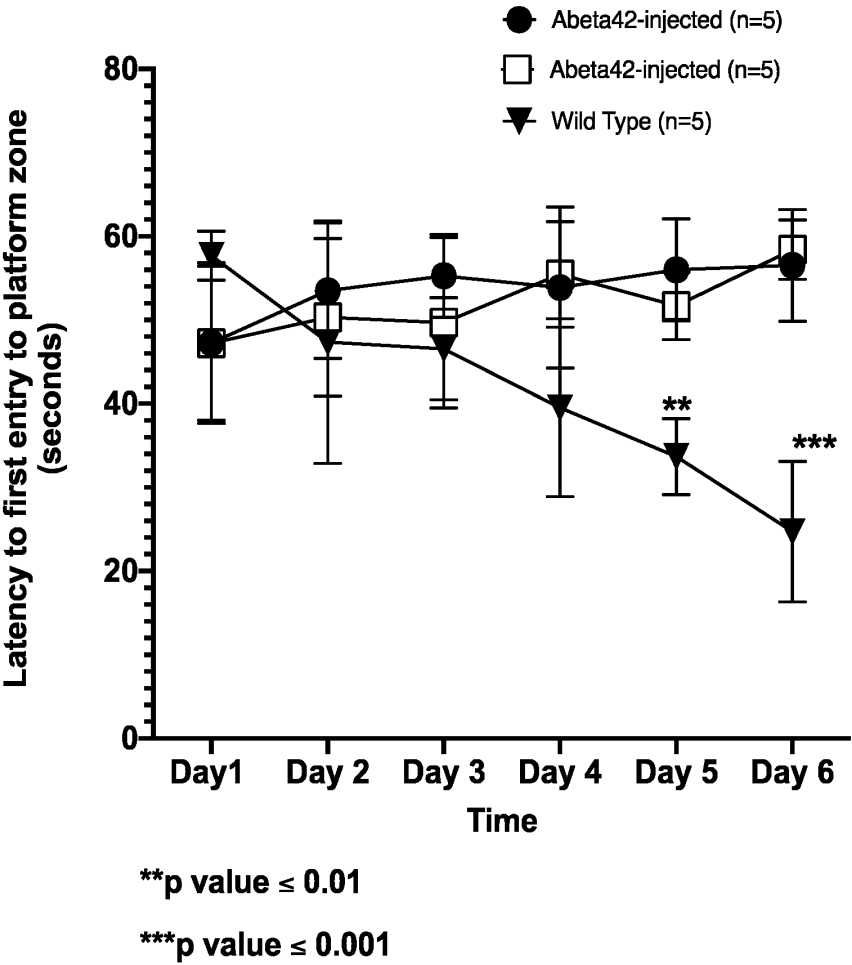


FIG. 6A

Morris water maze test on Abeta42-injected animals

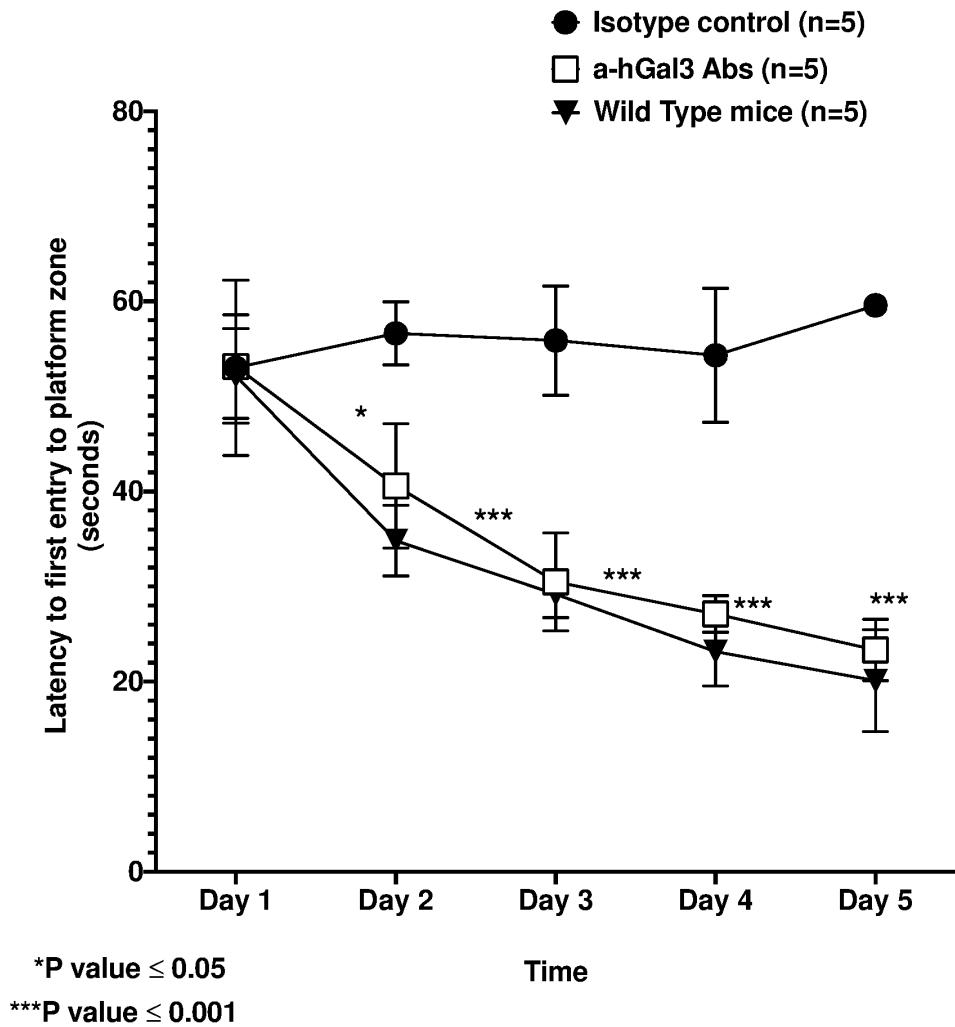


FIG. 6B

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Retention of memory after 24 hours

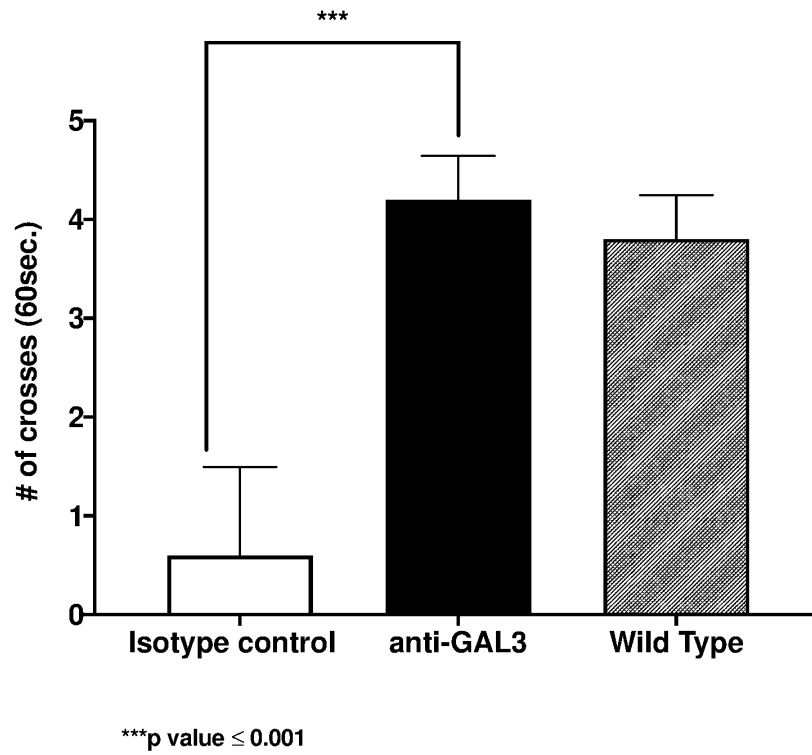


FIG. 7

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Aβ load using 6E10 Ab

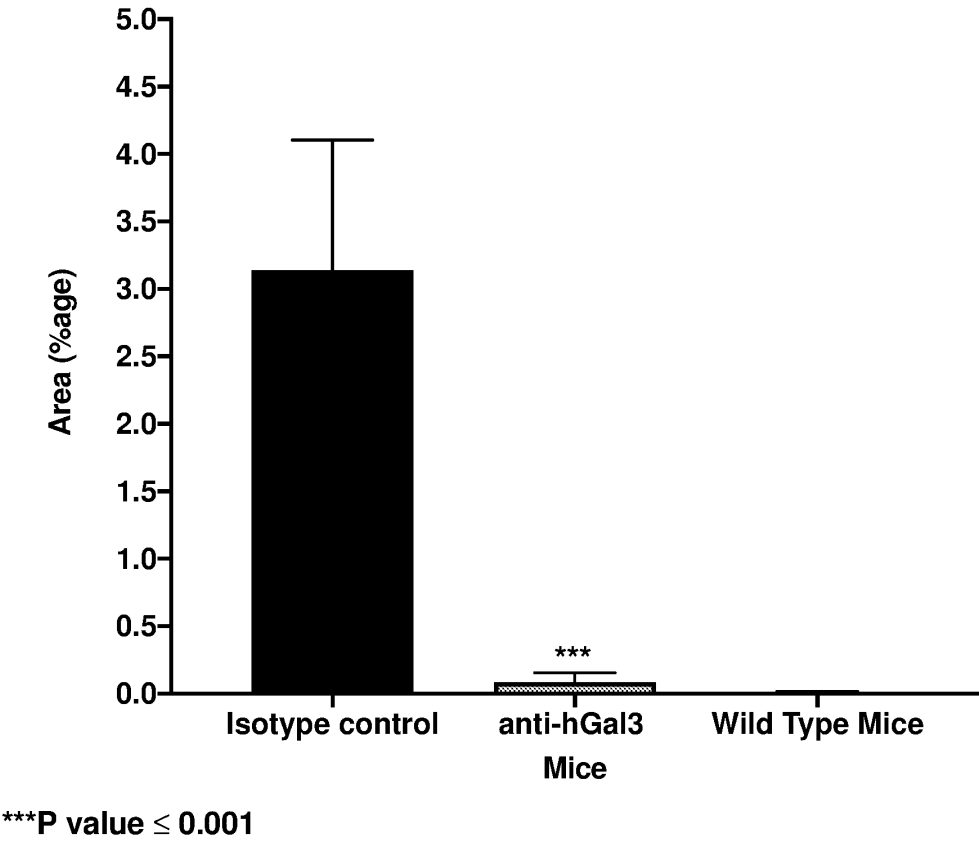


FIG. 8A

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NeuN levels

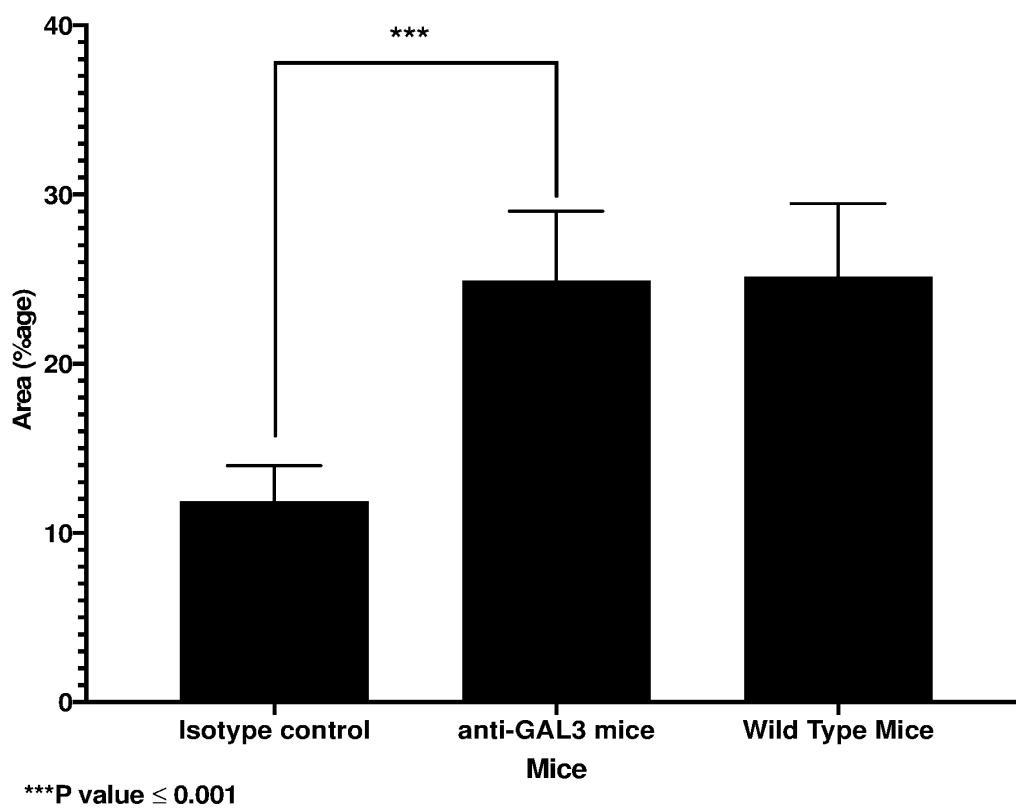


FIG. 8B

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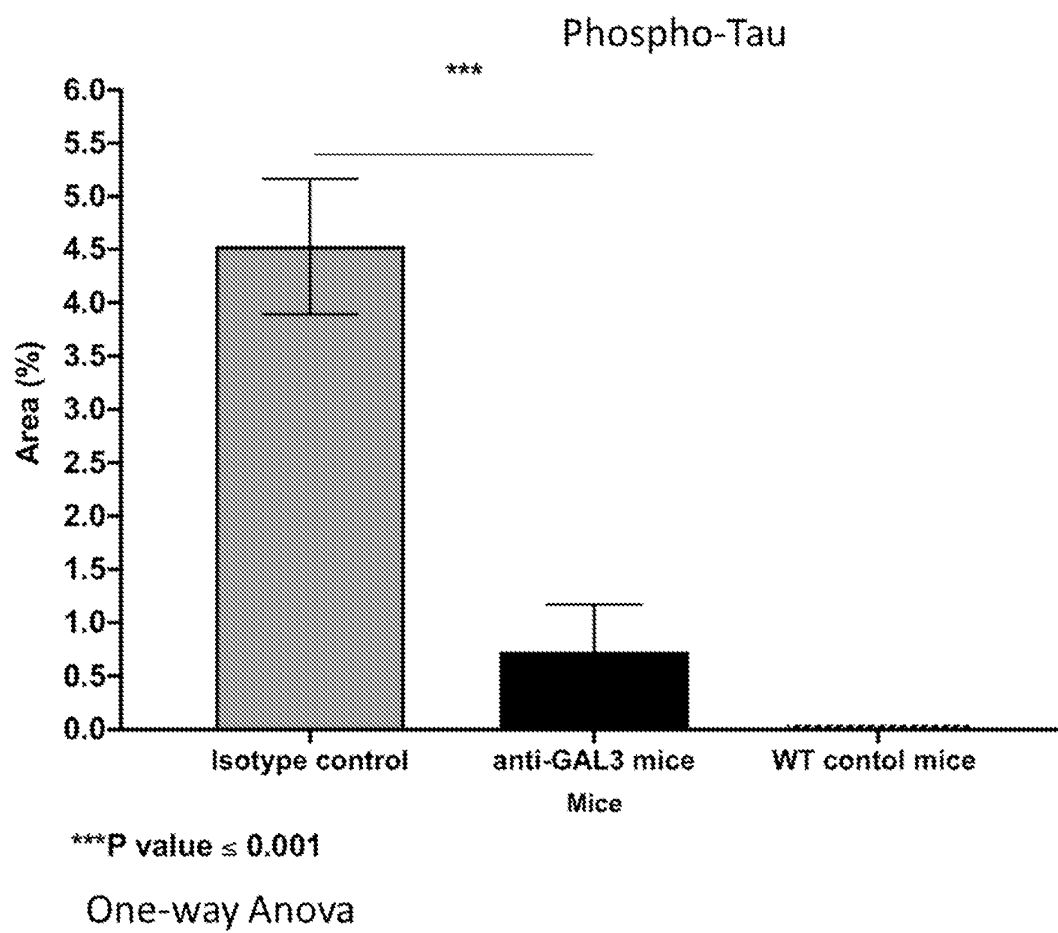


FIG. 8C

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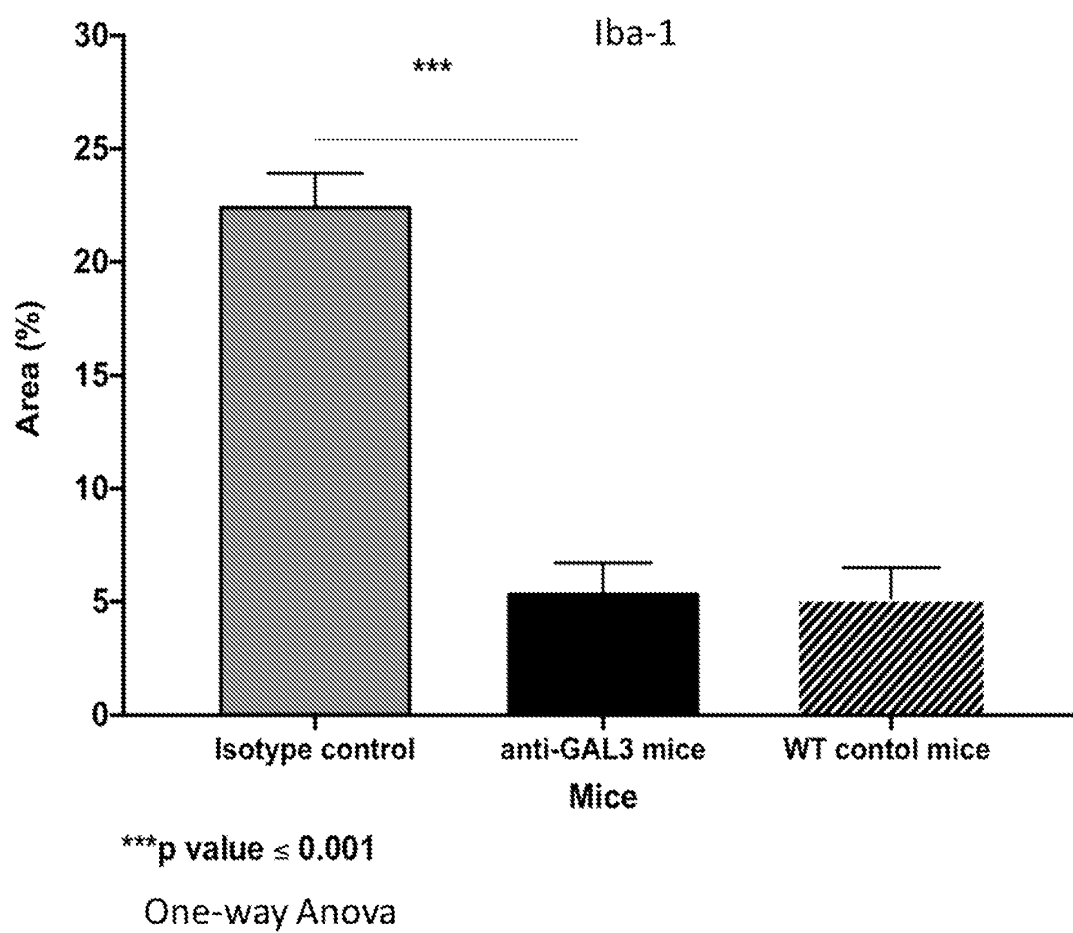


FIG. 8D

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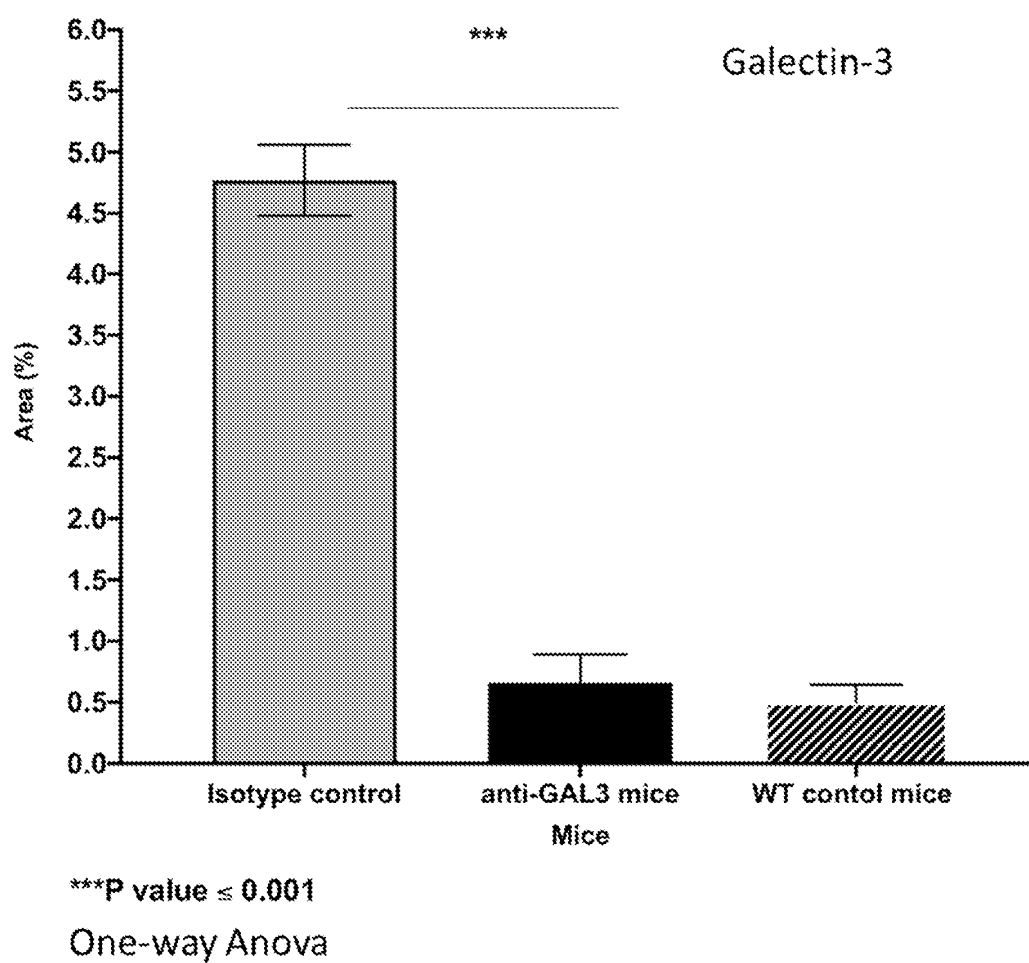
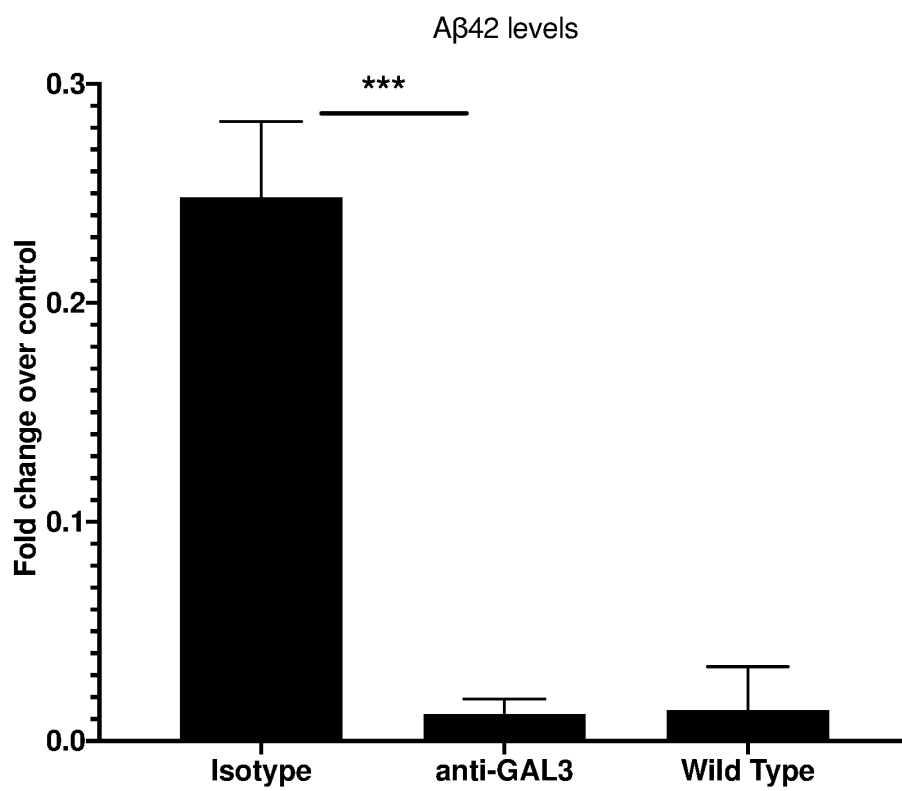


FIG. 8E

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***P value ≤ 0.001

FIG. 9

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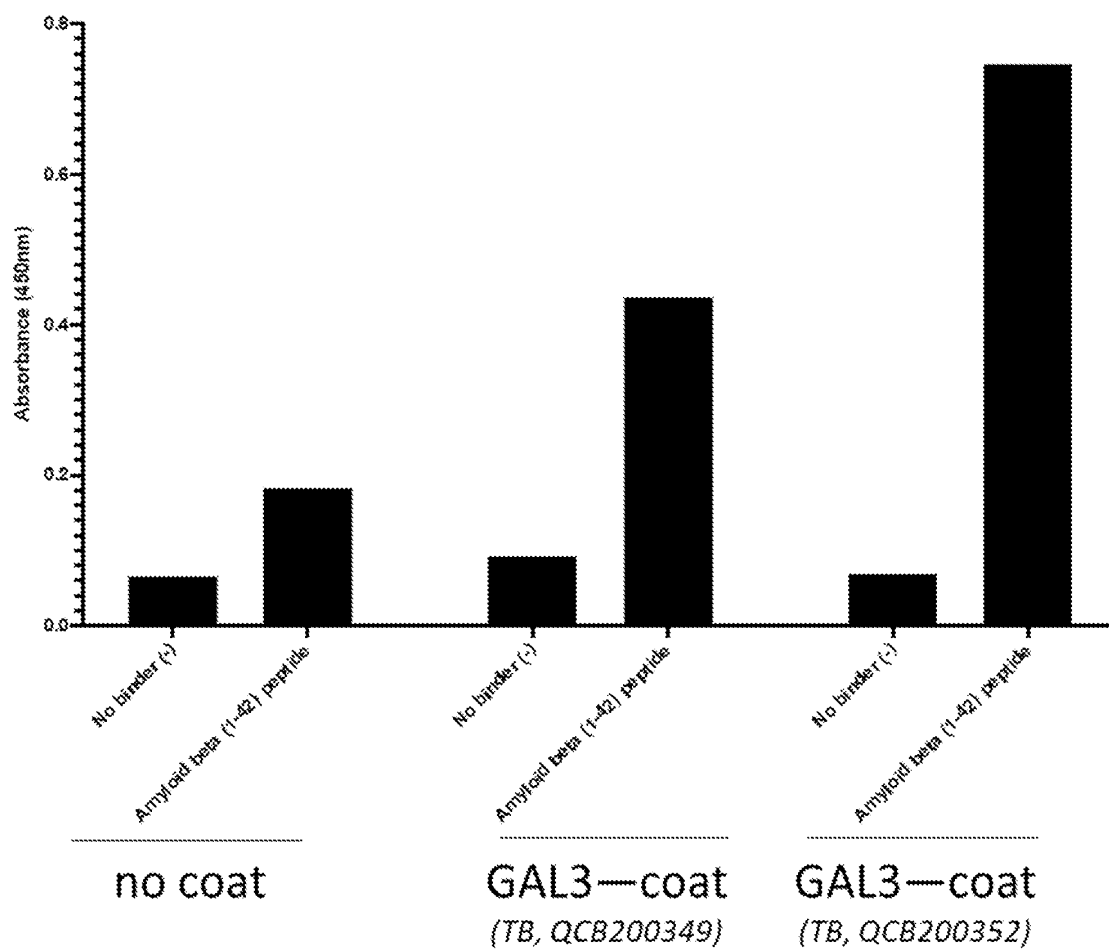


FIG. 10A

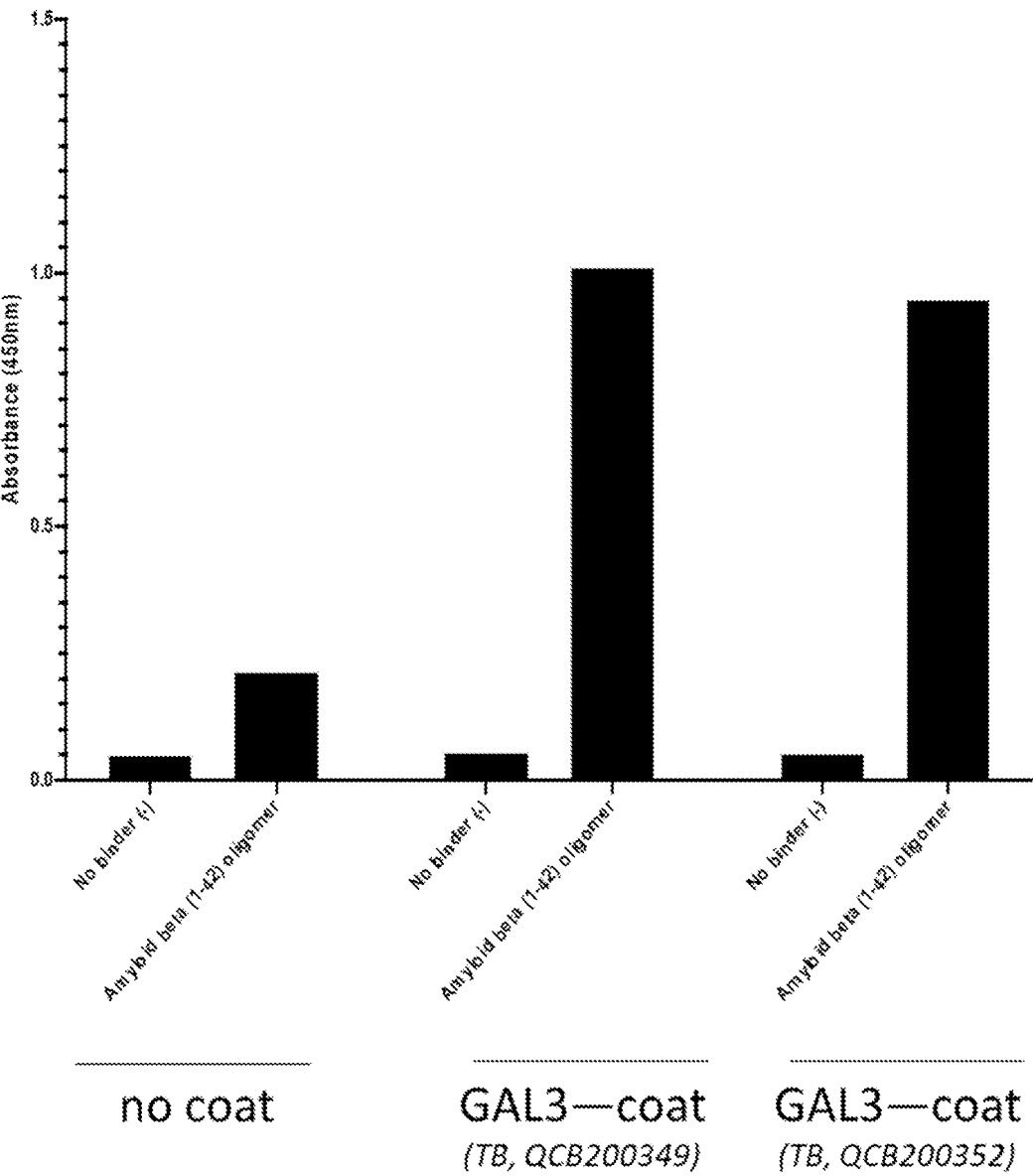


FIG. 10B

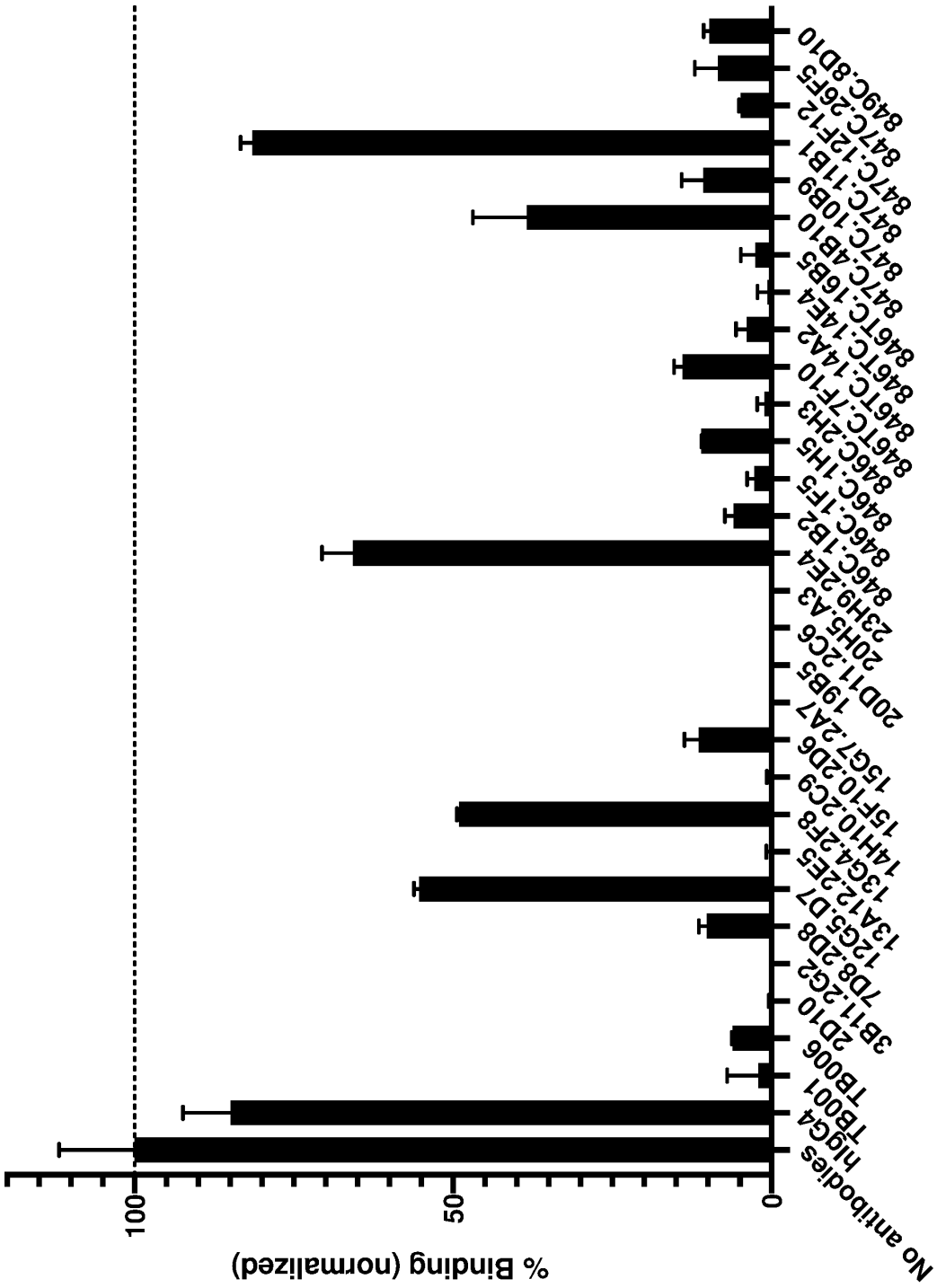


FIG. 11A

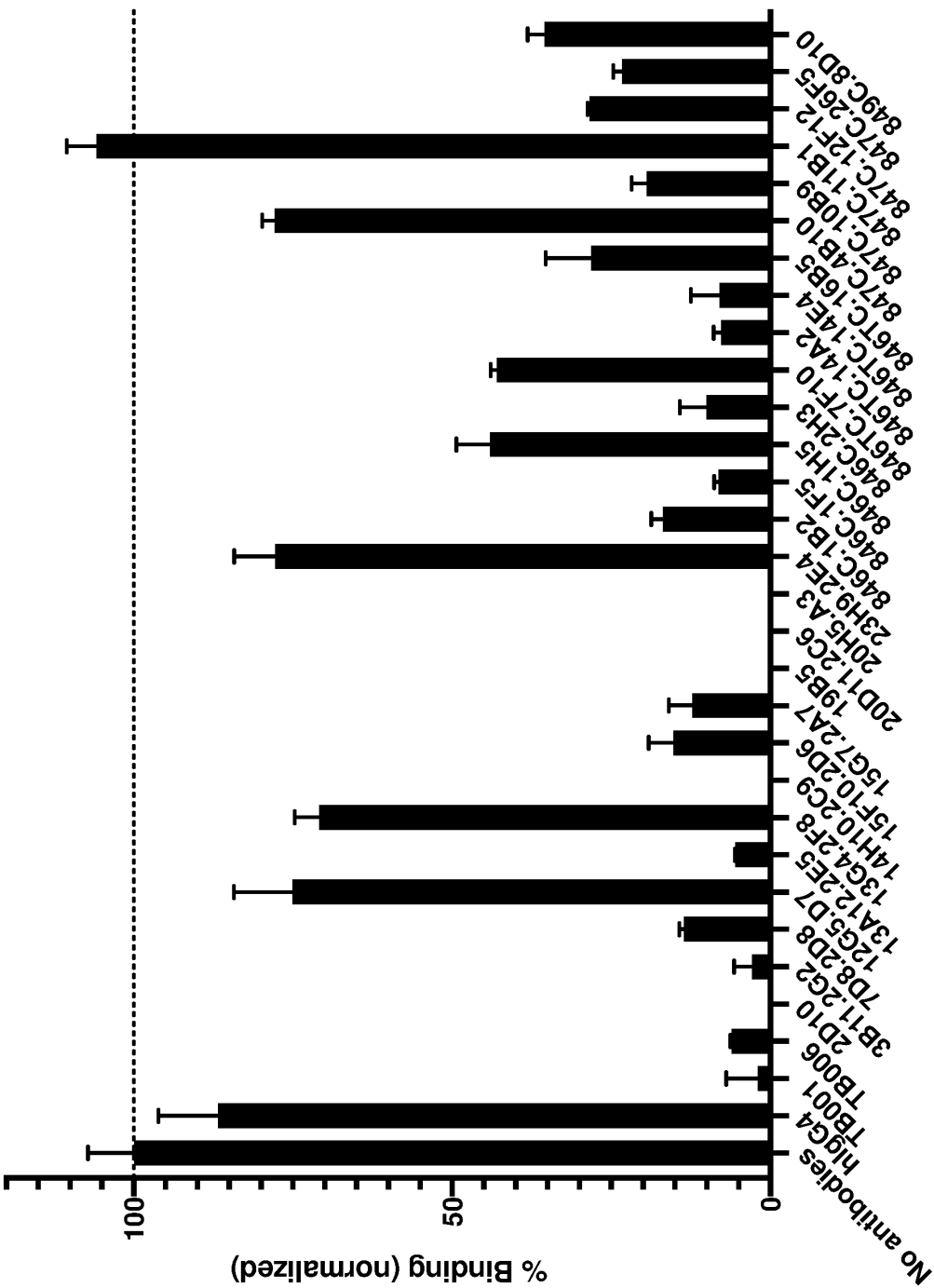


FIG. 11B

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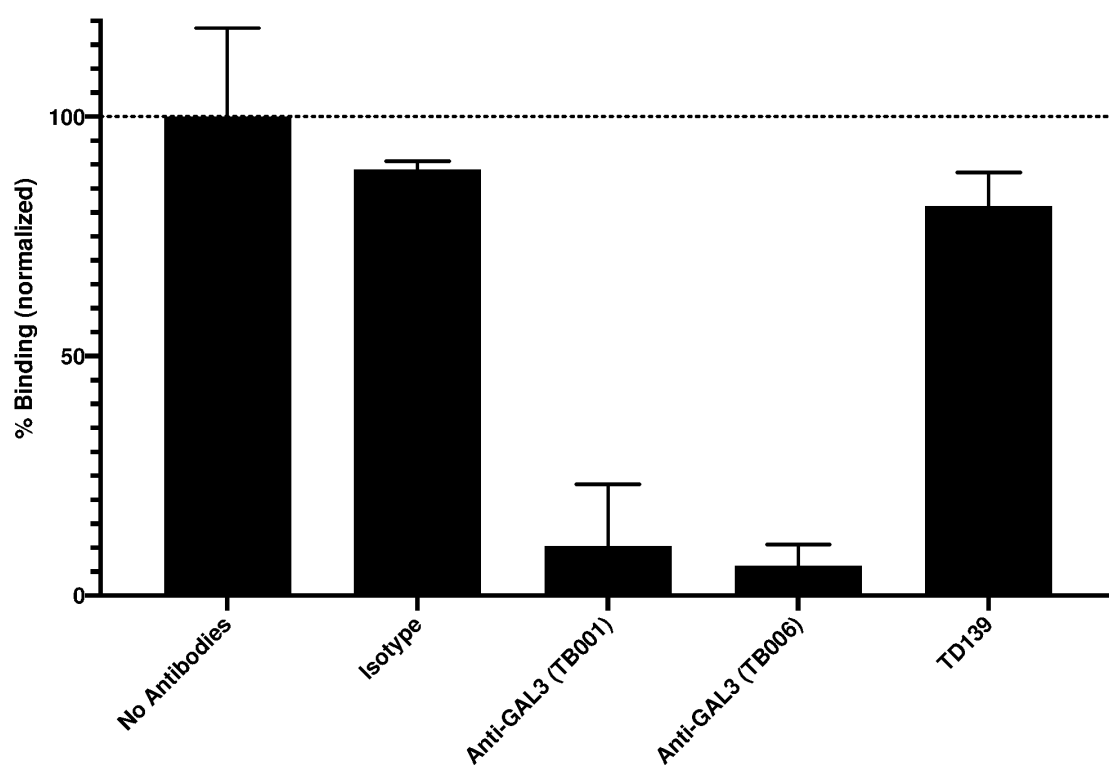


FIG. 11C

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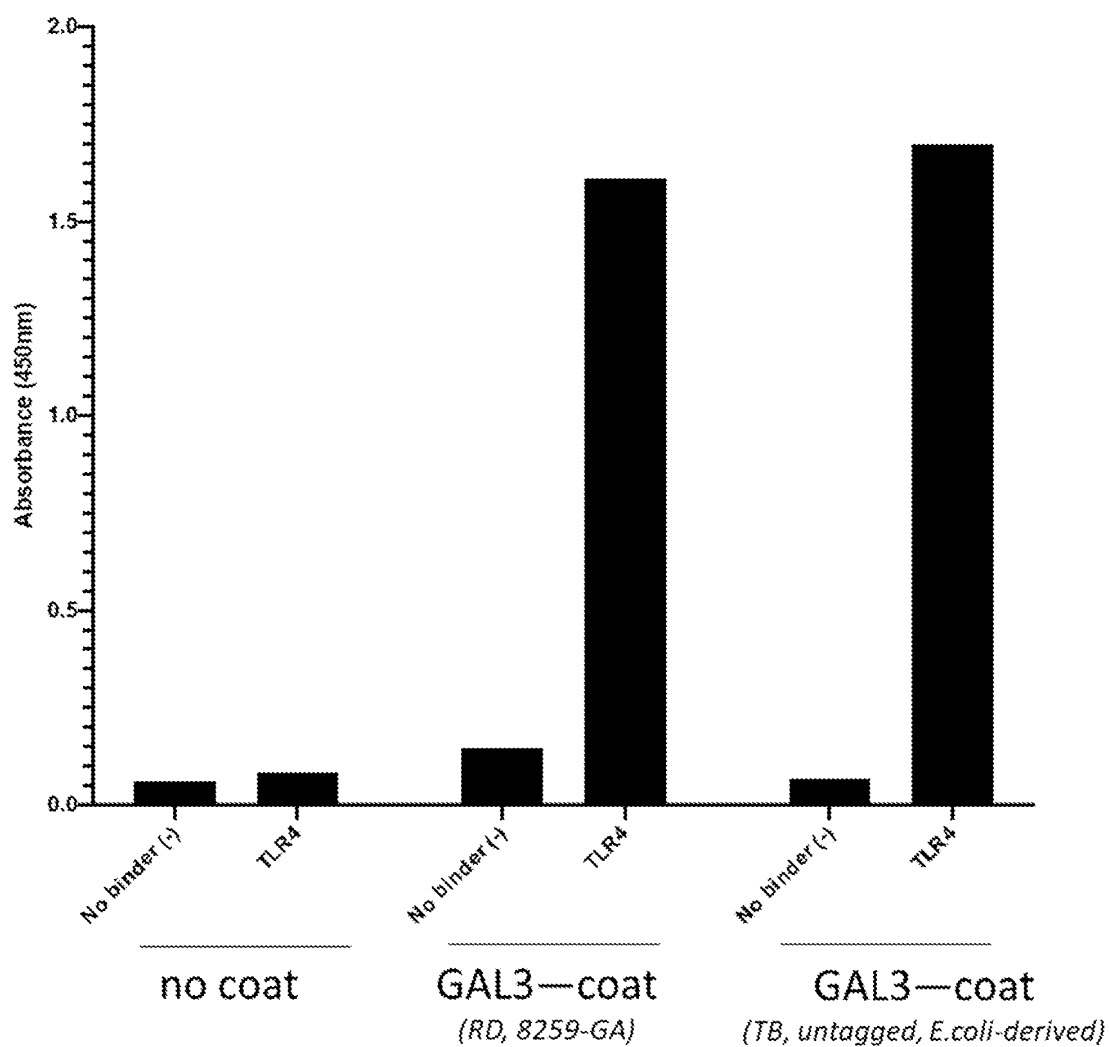


FIG. 12A

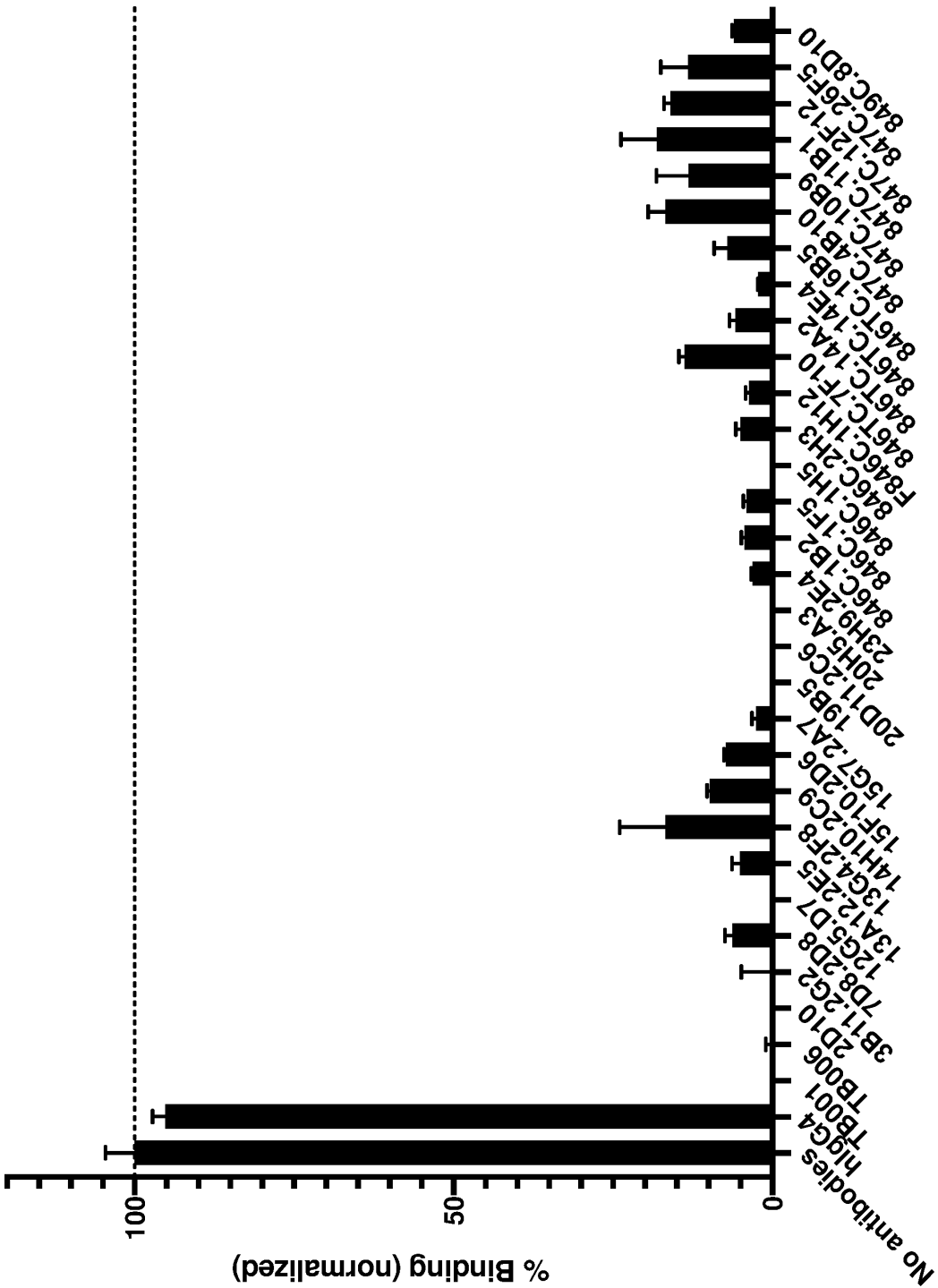


FIG. 12B

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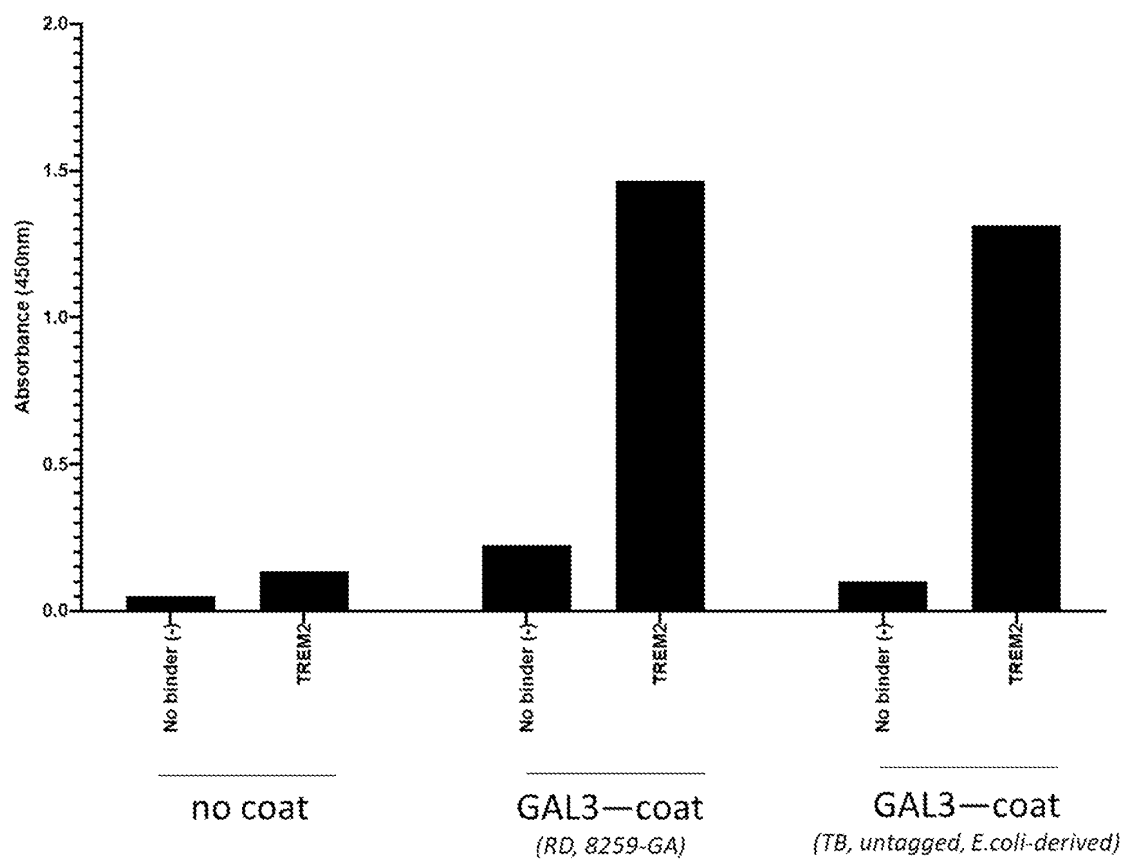


FIG. 13A

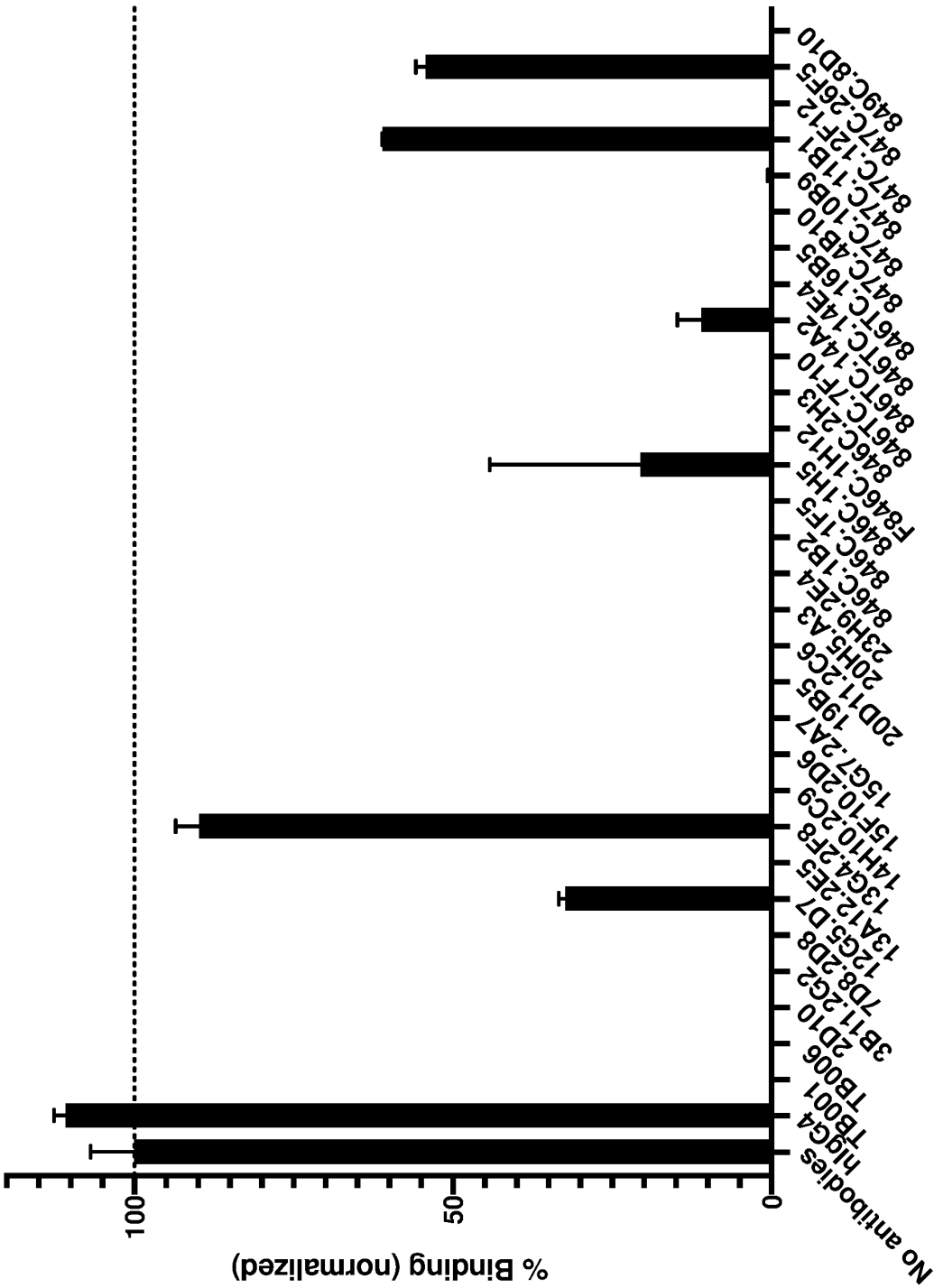


FIG. 13B

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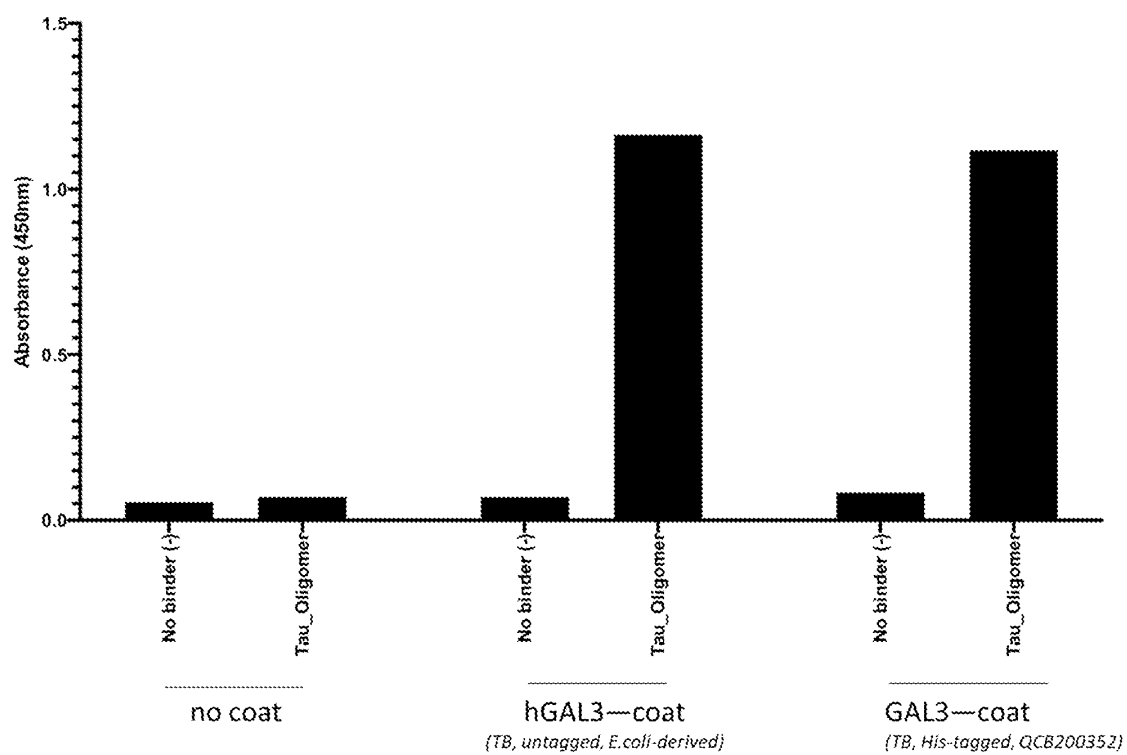


FIG. 14A

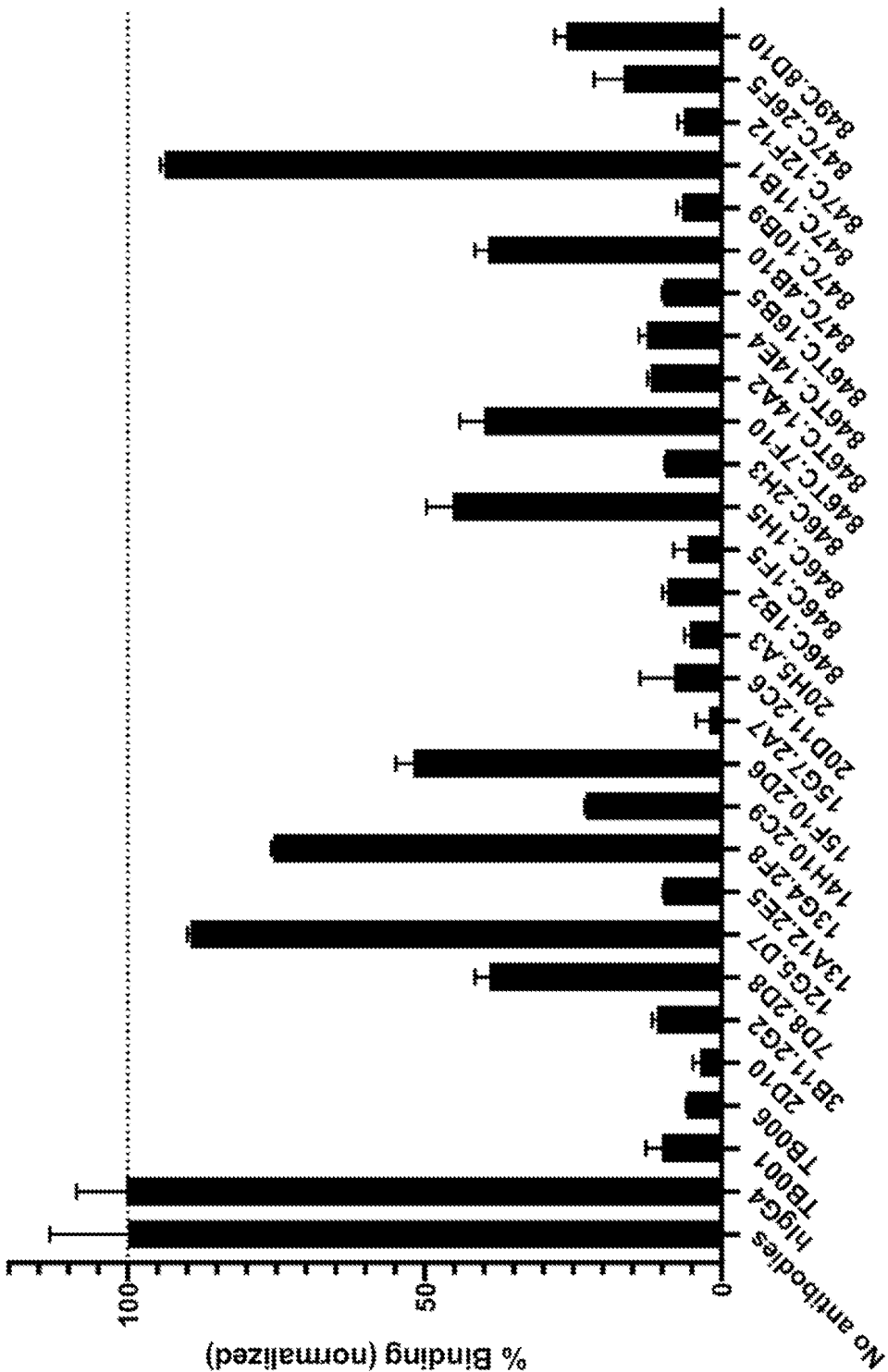


FIG. 14B

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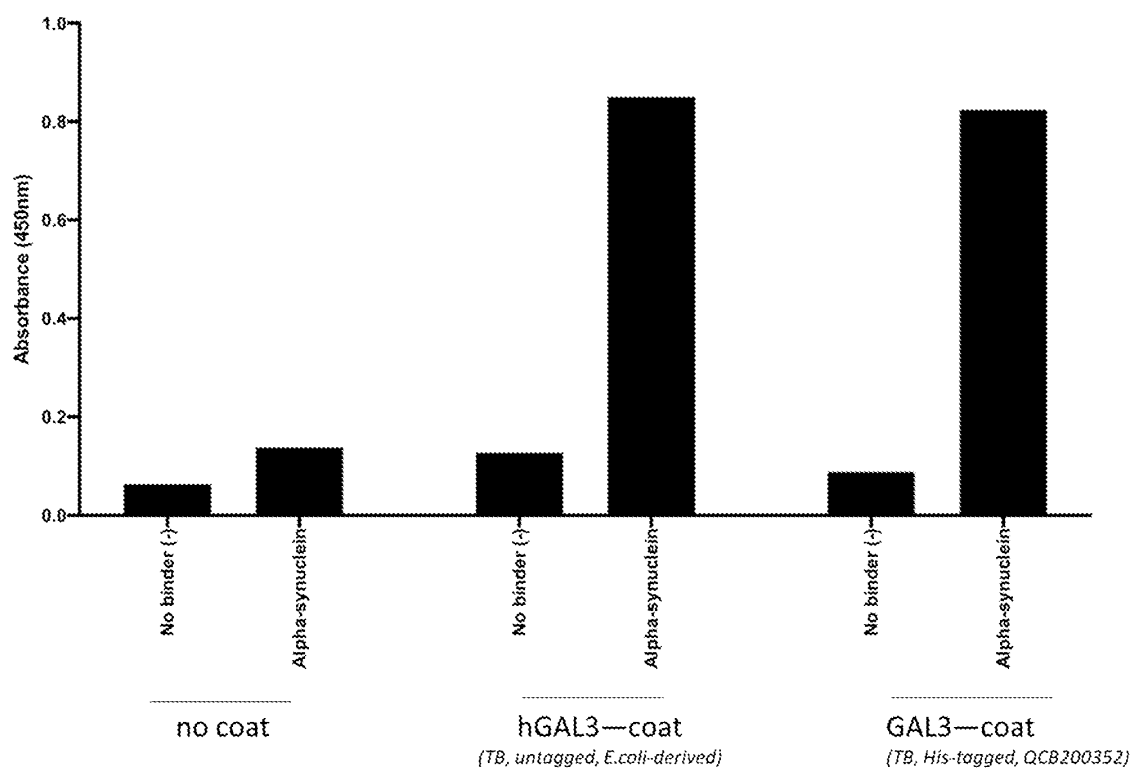


FIG. 15A

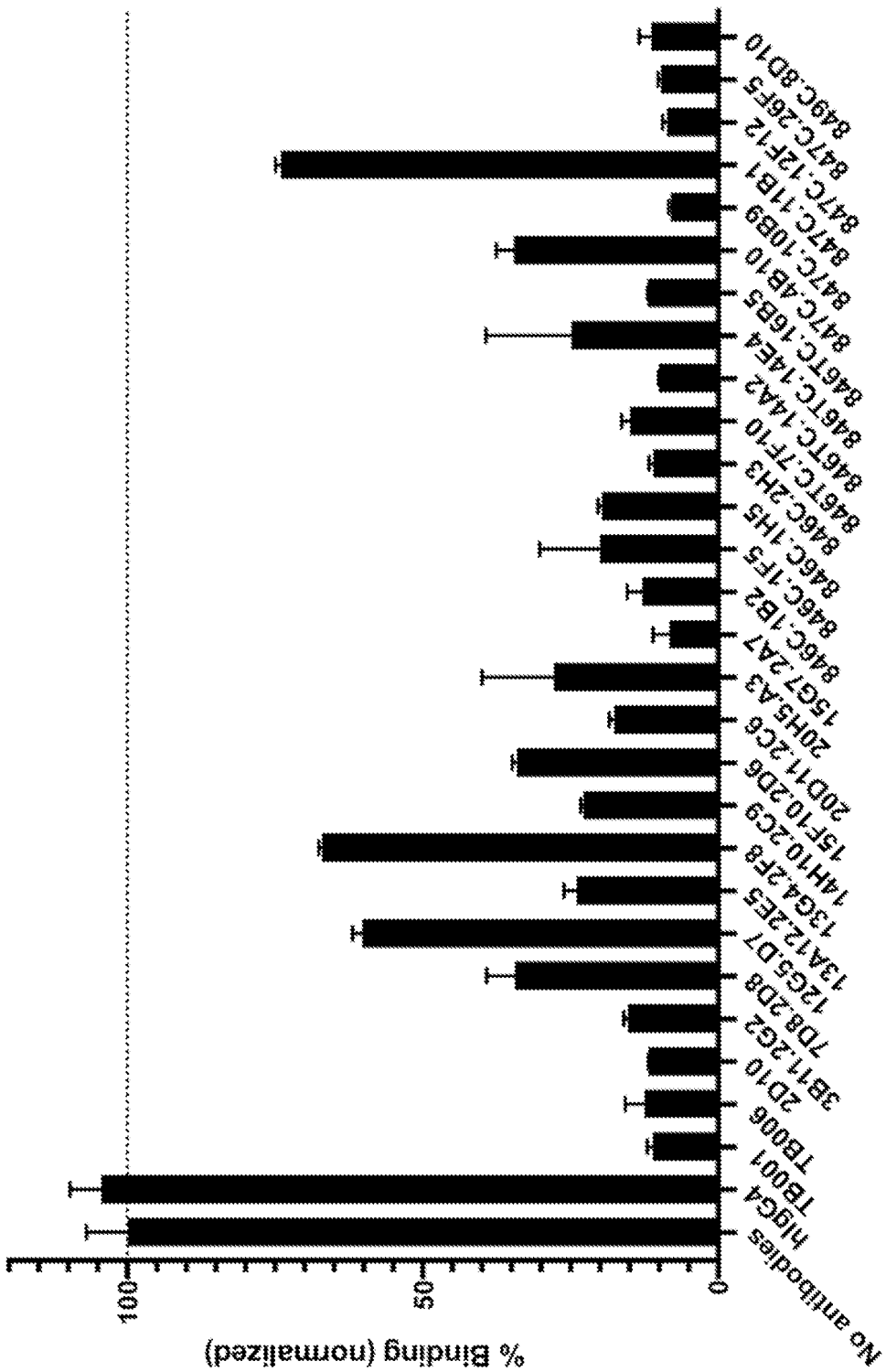


FIG. 15B

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PROTEIN	SEQ ID NO	SEQUENCE
Human galectin-3 Isoform 1 (homo sapiens) NCBI Ref. No.: NP_002297.2	1	MADNFSLHDALSGSGNPNPQGWPGAWGNQAGAGGYPGASYPGA YPGQAPPGAYPGQAPPGAYPGAPGAYPGAPAGVYPGPPSGPGAY PSSGQPSATGAYPATGPYGAAGPLIVPYNLPLGGVVPRLITILG TVKPNANRIALDFQRGNDVAFHFNPRFNENNRRVIVCNTKLDNNW GREERQSVFPFESGKPFKIQVLVEPDHFKVAVNDAHLLQYNHRVK KLNEISKLGISGDIDLTASASYTMI
Amyloid-beta precursor protein isoform c (APP695) (homo sapiens) NCBI Ref. No.: NP_958817.1	2	MLPGLALLLLAAWTARALEVPTDGNAGLLAEPQIAMFCGRNLNMH MNVQNGKWSDSPSGTKTCIDTKEGILQYCQEVYPELQITNVVEAN QPVTIQNWCKRGRKQCKTHPHFVIPYRCLVGEFVSDALLVPDKCKF LHQERMDVCETHLHWHTVAKETCSEKSTNLHDYGMLLPCGIDKFR GVEFVCCPLAEESDNVDSADAEEDDSVWVGADTDYADGSEDK VVEVAEEEEVAEVEEEEADDEDEDGDEVEEEEAEPEYEEATERTT SIATTTTTTTESVEEVVRVPTTAASTPDAVDKYLETPGDENEHAHFQ KAKERLEAKHRERMSQVMREWEAAERQAKNLPKADKKAVIQHFQ EKVESLEQEAANERQQLVETHMARVEAMLNDRRLALENYITALQ AVPPRPRHVFNMLKKYVRAEQKDRQHTLKHFEHVRMVDPKKAAQ IRSQVMTHLRVIYERMNQSLSLLYNVPAAVEEIQDEVDELLQKEQN YSDDVLANMISEPRISYGNDAIMPSLTETKTTVELLPVNGEFSDDL QPWHSFGADSVANTENEVEPVDARPAADRGLTTRPGSGLTNIKTE EISEVKMDAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGG VVIATVIVITLVMLKKKQYTSIHGVEVDAAVTPEERHLSKMQQN GYENPTYKFFEQMQN
Amyloid-beta peptide (1-42) (homo sapiens) Amino acids 597-638 of APP695	244	DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA
TGF-β receptor type 1 (TGFBRI) (homo sapiens) NCBI Ref No.: NP_004603.1	376	MEAAVAAPRPRLLLLVLAIAAAAAAAAAALLPGATALQCFCHLCTKD NFTCVTDGLCFVSVTETTDKVIHNSMCIAEIDLIPDRPFVPCAPSSKT GSVTTTTYCCNQDHCNKIELPTTVKSSPGLGPVELAAVIAGPVCFCI SLMLMVYICHNRTVIHHRVPNEEDPSLDRPFISEGTTLKDLIYDMTT SGSGSGLPLLVQRTIARTIVLQESIGKGRFGEVWRGKWRGEEVAVK IFSSREERSWFREAEIYQTVMLRHENILGFIAADNKDNGTWTQLWL VSDYHEHGSFLDYLNRYTVTVEGMIKLALSTASGLAHLHMEIVGT QGKPAIAHRDLKSKNILVKKNGTCCIALDLGLAVRHDSATDTIDIAPN HRVGTKRYMAPEVLDDSDINMKHFESFKRADIYAMGLVFWEIARRC SIGGIHEDYQLPY YDLVPSDPSVEEMRKVVCEQKL RPNIPNRWQSC EALRVMAKIMRECWYANGAARLTALRIKKTLSQLSQQEGIKM

FIG. 16

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PROTEIN	SEQ ID NO	SEQUENCE
TGF-β receptor type 2 (TGFB2) (homo sapiens) NCBI Ref No.: NP_003233.4	377	MGRGLLRGLWPLHIVLWTRIASTIPPHVQKSVNNDMIVTDNNGAVKF PQLCKFCDVRFSTCDNQKSCMSNCSITSICEKPQEVCAVWRKNDENI TLETVCHDPKLPYHDFILEDAAAPKCIMKEKKKPGETFFMCSCSSDEC NDNIIFSEEYNTSNPDLLLVIQVGTGISLLPPLGVAISVIIIFYCYRVNRQ QKLSSTWETGKTRKLMFSEHCAIILEDSDISSTCANNINHNTLLP IELDTLVGKGRFAEVYKAKLKQNTSEQFETVAVKIFPYEEYASWKTE KDIFSDINLKHENILQFLTAEERKTELKGQYWLITAFHAKGNLQEYLT RHVISWEDLRKLGLSSSLARGIAHLHSDHTPCGRPKMPIVHRDLKSSNIL VKNDLTCCLCDFGLSRLDPTLSVDDLANSGQVGTARYMAPEVLESR MNLENVESFKQTDVYSMALVLWEMTSRCNAVGEVKDYEPFPGSKV REHPCVESMKDNVLRDRGRPEIPSWLNLHQGIQMVCELTTECWDHDP EARLTAQCVAERFSELEHLDRLSGRSCSEEKIPEDGSLNTTK
TGF-β receptor type 3 (TGFB3) (homo sapiens) NCBI Ref No.: NP_003234.2	378	MTSHYVIAIFALMSSCLATAGPEPGALCELSVPSASHPVQALMESFTV LSGCASRGTTGLPQEVHVLNLRTAGQGPGQLQREVTLHLNPISSVHHI HKSVVFLNSPHPLVWHLKTERLATGVSRLFLVSEGSVVQFSSANFSL TAETEERNFPHGNEHLLNWARKEYGAVTSFTELKIARNIYIKVGEDQ VFPPKCNIGKNFLSLNYLAEYLQPKAAEGCVMSSQPQNEEVHIIELITP NSNPYSFAQVDITIDIRPSQEDLEVVKNLILILKCKKSVNWVKSFDVK GSLKIIAPNSIGFGKESERSMTMTKSIRDDIPSTQGNLVKWARDNGYSP ITSYTMAPVANRFHLRLNNAEEMGDEEVHTIPPELRILLDPGALPAL QNPPIRGGEGQNGGLPFPFPDISRRVWNEEGEDGLPRPKDPVIPSILFP GLREPEEVQGSVDIALSVKCDNEKMIVAVEKDSFQASGYSGMDVTLL DPTCKAKMNGTHFVLESPLNGCGTRPRWSALDGVVYYNSIVIQVPAL GDSSGWPDPGYEDLESNGFPGDMDEGDASLFRPEIVVFNCSLQQV RNPSSFQEQPHGNITFMELYNLTLFLVPSQGVFSVPENGHVYVEVSV TKAEQELGFAIQTCFISPSNPDRMSHYTIIENICPKDES VKFYSPKRVH FPIQADMDKKRFSFVFKPVFNTSLLFLQCELTLCTKMEKHPQKLPKC VPPDEACTSLDASIIWAMMQNKKTFKPLAVIHHEAESKEKGPSMKE PNPISPPIFHGLDTLTVMGIAFAAFVIGALLTGALWYIYSHTGETAGRQ QVPTSPPASENSSAAHSIGSTQSTPCSSSSTA
FGFR1 alpha IIIb/IIIc (homo sapiens) NCBI Ref No: NP_056934 IIIb: Arg22-Lys310, Ala359-Glu374 IIIc: Arg22-Glu374	379	MWSWKCLLFWAVLVTATLCTARPSPTLPEQAQPWGAPVEVESFLVH PGDLLQLRCRLRDDVQSNWLRDGVQLAESNRTRITGEEVEVQDSVP ADSGLYACVTSSPSGSDTTYFSVNVSDALPSSDDDDDDSSSEEKET DNTKPNPVAPYWTSPKMEKKLHAVPAAKTVKFKCPSSGTPNPTLR WLKNGKEFKPDHRIGGYKVRYATWSIIMDSVVP SDKGNITCIVENEY GSINHTYQLDVVERSPHRPILQAGLPANKTVALGSNVEFMCKVYSDP QPHIQWLKHIEVNGSKIGPDNL PYVQILKTAGVNTTDKEMEVLHLRN VSFEDAGEYTCLAGNSIGLSHSAWLTVLEALEERPAMTSPLYLEIII YCTGAFLISCMVGSVIVYKMKSGTKKSDFHSMQMAVHKLAKSIPLRRQ VTVSADSSASMNSGVLLVRPSRLSSSGTPMLAGVSEYELPEDPRWELP RDRLVLGKPLGEGCFGQVVLAEAIGLDKDKPNRVTKVAVKMLKSDA TEKDLSDLISEMEMMMKMGKHKNIINLLGACTQDGPLYVIVEYASKG NLREYLQARRPPGLECYNP SHNPEEQ LSSKDLVSCAYQVARGMEYL ASKKCIHRDLAARNVLVTEDNVMKIADFGFLARDIHHIDYKKTNNGR LPVKWMAPEALFDRIYTHQSDVWSFGVLLWEIFTLGSPYPGPVVEE LFLKLLKEGHRMDKPSNCTNELYMMMRDCWHAVPSQRPTFKQLVED LDRIVALTSNQEYLDLSMPLDQYSPSPFDTRSSTCSSGEDSVFSHEPLP EEPCLPRHPAQLANGGLKRR

Figure 16 cont.

PROTEIN	SEQ ID NO	SEQUENCE
FGFR1 alpha IIIb Ig domain (homo sapiens) NCBI Ref No: AAB19502	380	HSGINSSDAEVLTLFNVTEAQSGEYVCKVSNYIGEANQSAWLTVTTRP
FGFR2 alpha IIIb (homo sapiens) NCBI Ref No: CAA39654 Arg22-Glu378	381	MVSWGRFICLVVVVTMATLSLARPSFSLVEDTTLEPEEPPTKYQISQPE VYVAAPGESLEVRCLLKDAAVISWTKDGVHLGPNNRTVLIGEYLQI KGATPRDSGLYACTASRTVDSETWYFMVNVTDIAISSGDEDDTDGA EDFVSENSNNKRAPYWTNTEKMEKRLHAVPAANTVKFRCPAGGNP MPTMRWLKNGKEFKQEHRIGGYKVRNQHWSLIMESVVPDCKGNYT CVVENEYGSINHTYHLDVVERSHPRPILQAGLPANASTVVGGDVEFV CKVYSDAQPHIQWIKHVEKNGSKYGPDGLPYLKV LKHSGINSSNAE VLALFNVTEADAGEYICKVSNIYIGQANQSAWLTVPKQQAPGREKE ITASPDYLEIAIYCIGVFLIACMVVTVILCRMKNNTKKPDFSSQPAVH KLTKRIPLRRQVTVSAESSSSMNSNTPLVRITRLSSTADTPMLAGVS EYELPEDPKWEFPRDKLTLGKPLGEGCFGQVVM AEAVGIDKDKPKE AVTVAVKMLKDDATEKDLSDLVSEMEMMKMIGKHKNINLLGACT QDGPLYVIVEYASKGNLREYLRARRPPGMEYSYDINRVPEEQMTFK DLVSCTYQLARGMEYLASQKCIHRDLAARNVLVTENNVMKIADFGL ARDINNIDYYKTTNGRLPVKWM APEALFDRVYTHQSDVWSFGVL MWEIFTLGGSPYPGIPVEELFKLLKEGHRMDKPANCTNELYMMMRD CWHAVPSQRPTFKQLVEDLDRILTLTTNEI
FGFR2 alpha IIIc (homo sapiens) NCBI Ref No: P21802 Arg22-Glu337 & Leu27- Glu377	382	MVSWGRFICLVVVVTMATLSLARPSFSLVEDTTLEPEEPPTKYQISQPE VYVAAPGESLEVRCLLKDAAVISWTKDGVHLGPNNRTVLIGEYLQI KGATPRDSGLYACTASRTVDSETWYFMVNVTDIAISSGDEDDTDGA EDFVSENSNNKRAPYWTNTEKMEKRLHAVPAANTVKFRCPAGGNP MPTMRWLKNGKEFKQEHRIGGYKVRNQHWSLIMESVVPDCKGNYT CVVENEYGSINHTYHLDVVERSHPRPILQAGLPANASTVVGGDVEFV CKVYSDAQPHIQWIKHVEKNGSKYGPDGLPYLKV LKAAGVNNTTDK EIEVLYIRNVTFEDAGEYTCLAGNSIGISFHSWLTVPAPGREKEITA SPDYLEIAIYCIGVFLIACMVVTVILCRMKNNTKKPDFSSQPAVHKL TKRIPLRRQVTVSAESSSSMNSNTPLVRITRLSSTADTPMLAGVSEYE LPEDPKWEFPRDKLTLGKPLGEGCFGQVVM AEAVGIDKDKPKEAVT VAVKMLKDDATEKDLSDLVSEMEMMKMIGKHKNINLLGACTQDG PLYVIVEYASKGNLREYLRARRPPGMEYSYDINRVPEEQMTFKDLVS CTYQLARGMEYLASQKCIHRDLAARNVLVTENNVMKIADFGLARDI NNIDYYKTTNGRLPVKWM APEALFDRVYTHQSDVWSFGVLMWEI FTLGGSPYPGIPVEELFKLLKEGHRMDKPANCTNELYMMMRDCWH AVPSQRPTFKQLVEDLDRILTLTTNEEYLDLSQPLEQYSPSPDTRSS CSSGDDSVFSPDPMPEYPCLPQYPHINGSVKT

Figure 16 cont.

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PROTEIN	SEQ ID NO	SEQUENCE
FGFR3 IIIc (homo sapiens) NCBI Ref No: P22607 Glu23-Gly375	383	MGAPACALALCVAVAIVAGASSES LGTEQ RVVGRAAE VPGPEPGQ QEQLVFGSGDAVELSCPPPGGGPMGPTVWVKDGTGLVPSERVLVG PQRLQVLNASHEDSGAYSCRQRLTQRVLCHF SVRVTDAPSSGDDE DGEDEAEDTGVDTGAPYWTRPERMDKKLLAVPAANTVRFRC PAA GNPTPSISWLKNGREFRGEHRIGGIKLRHQQWSL VMESVVP SDRGN YTCVVENKFGSIRQTYTL DVLERSPHRPILQAGLPANQTA VLGSDV EFHCKVYSDAQPHIQWLKHVEVNGSKVGP DGTPTVTVLKTAGAN TTDKLEVLVSLHNVT FEDAGEYTCLAGNSIGFSHHS AWLVVLP AEE ELVEADEAGSVYAGILSYGVGFFLFILVVA AVTLCRLRSPPKKGLGS PTVHKISRFP LKRQVSLESNASMSSNTPLVRIARLSSGEGPTLANVSE LELPADPKWELSRARLT LGKPLGEGCFGQVVM AEAI GIDKDRAAK PVTVA VKMLKDDATDKDLS DLVSEMEMMKMIGKHKNIINLLGAC TQGGPLYVLVEYAAKGNLREFLRARRPPGLDYSFDTCKPPEEQ LTF KDLVSCAYQVARGMEYLA SQKCIHRDLAARNVLV TEDNVMKIAD FGLARDVHNLDYYKKT TNGRLPVKWM APEALFDRVYTHQSDVWS FGVLLWEIFTLGGSPYPGIPVEELFKLLKEGHRMDK PANCTHDLYM IMRECWHAAPSQRPTFKQLVEDLDRVLTVTSTDEYLDLSAPFEQYS PGGQDTPSSSSSGDDSVFAHDLLPPAPPSSGGSR T
FGFR4 (homo sapiens) NCBI Ref No: P22455 Leu22-Asp369	384	MRLLLALLGVLLSVPGPPVLSLEA SEEVELEPCLAPSLEQQEQELTV ALGQPVRLCCGRAERGGHWYKEGSRLAPAGRVRGWRGRLEIASFL PEDAGRYLCLARGSMIVLQNLTLITGDSL TSSNDD EDPKSHRDP SNR HSYPQQAPYWTHPQRMEKKLHAVPAGNTVKFRCPAAGNPTPTIRW LKDGQAFHGENRIGGIRLRHQHWSL VMESVVP SDRGTYTCLVENA VGSIRYNYLLDV LERSPHRPILQAGLPANTTAVVGS DVELLCKVYS DAQPHIQWLKHIVINGSSFGADGFPYVQVLKTADINSSEVEVLYLR NVSAEDAGEYTCLAGNSIGLSYQSAWLTVLPEEDPTWTAAAP EAR YTDIILYASGSLALAVLLLLAGLYRGQALHGRHPRPPATVQKLSRFP LARQFSLES GSSGKSSSSLVRGVRLSSSGPALLAGLVSLDPLDPLW EFPRDRLVLGKPLGEGCFGQVVRAEAFGMDPARPDQASTVAVKML KDNASDKDLADLVSEMEVMKLI GRHKNIINLLGVCTQEGPLYVIVE CAAKGNLREFLRARRPPGPDLS PDGPRSSGEP LSFVVLVSCAYQVA RGMQYLESRKCIHRDLAARNVLV TEDNVMKIAD FGLARGVHHIDY YKKT SNGRLPVKWM APEALFDRVYTHQSDVWSFGILLWEIFTLGG SPYPGIPVEELFSL LREGHRMDRPPHCPPELYGLMRECWHAAPSQR PTFKQLVEALDKVLLAVSEEYLDLRLTFGPYSPSGGDASSTCSSSDS VFSDPLPLGSSSFPFGSGVQT

Figure 16 cont.

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PROTEIN	SEQ ID NO	SEQUENCE
EGFR (homo sapiens) NCBI Ref No: CAA25240 Met1-Ser645	385	MRPSGTAGAAALLALLAALCPASRALEEKKVCQGTSNKLTQLGTFEDHFLSLQR MFNNCEVVLGNLEITYVQRNYDLNFLKTIQEVAGYVLIALNTVERIPLNLQIIR GNMYEENSALAVLSNYDANKTGLKELPMRNLQEILHGAVRFSNNPALCNVE SIQWRDIVSSDFLSNMSMDFNHLGSCQKCDPSCPNGSCWGAGEENCQKLTII CAQQCSGRCRGKSPSDCCCHNQCAAGCTGPRESCLVCRKFRDEATCKDTCPL MLYNPTTYQMDVNPEGKYSFGATCVKKCPRNYVVDHGSVCVRACGADSYEM EEDGVRKCKKCEGPCRKVCNGIGIGEFKDSLSINATNIKHFKNCTISISGDLHILP VAFRGDSFTHTPPLDPQELDILKTVKEITGFLLIQAWPENRTDLHAFENLEIIRGR TKQHGGFSLAVVSLNNTSLGLRSLKEISDGDVHSNKNLCYANTINWKKLFGTS GQKTKIISNRGENSCKATGQVCHALCSPEGCWGPEPRDCVSCRNVSRGRECV KCKLLEGEPRFVENSECIQHPECLPQAMNITCTGRGPDNCIQCAHYIDGPH VKTCPAGVMGENNTLVWKYADAGHVCHLCHPNCTYGTGPGLEGCPNTGPKI PSIATGMVGAALLLLLVVALGIGLFMRRRHIVRKRTLRLRLQERELVEPLTPSGEA PNQALLRILKETEFKKIKVLGSGAFGTVYKGLWIPEGEKVKIPVAIKELREATSP KANKEILDEAYVMASVDNPHVCRLLGICLTSTVQLITQLMPFGCLLDYVREHK DNIGSQYLLNWCVQIAKMNYLEDRLVHRDLAARNVLVKTQPHVKITDFGL AKLLGAEEKEYHAEGGKVPIKWMALLESILHRIYTHQSDVWSYGVTVWELMTF GSKPYDGIPASEISSILEKGERLPQPPICTIDVYMIMVKCWMIDADSRPKFRELIIE FSKMARDPQRYLVIQDERMHLPSPTDSNFYRALMDEEDMDDVDDADEYLIP QQGFSSPSTSRTPLLSSLSATSNNSTVACIDRNLQSCPIKEDSFLQRYSSDPTG ALTEDSIDDTFLPVPEYINQSVPKRPAGSVQNPVYHNQPLNPAPSRDPHYQDPH STAVGNPEYLNTPVQPTCVNSTFDSPAHWAKGSHQISLDNPDYQQDFPKEAK PNGIFKGSTAENAEYLRVAPQSSEFIGA
VEGFR2 (homo sapiens) NCBI Ref No: AAC16450 Ala20-Glu764	386	MESKVLLAVALWLCVETRAASVGLPSVSLDLPRLSIQKDILTIKANNTLQITCRG QRDLDWLWPNNQSGSEQRVEVTECSDGLFCKTLTIPKVGINDTGAYKCFYRET DLASVIYVYVQDYRSPFIASVSDQHGVVYITENKNKTVPICLGSISNLNVSLCA RYPEKRFVPDGNRISWDSKKGFTIPSYMISYAGMVCFEAKINDESYQSIMYIVV VVGRIYDVVLSPSHGIELSVGEKLVNCTARTELNVGIDFNWEYPSSKHQHKK LVNRDLKTQSGSEMKKFLSTLTIDGVTRSDQGLYTCAASSGLMTKKNSTFVRV HEKPFVAFSGMESLVEATVGERVRIPAKYLGYPPEIKWYKNGIPLESNHTIK AGHVLTIMEVSEKDTGNYTVILTNPISKEKQSHVVSLLVYVPPQIGEKSLISPVD SYQYGTQTCTCTVYAIPPPHHHIHWYQLEEECANEPSQAVSVTNYPCEEWR SVEDFQGGNKIEVNKNQFALIEGKNKTVSTLVIQAANVSALYKCEAVNKVGRG ERVISFHVTRGPEITLQPDMMQTEQESVSLWCTADRSTFENLTWYKLGPPPLPIH VGELPTPVCKNLDLWKLNATMFSNSTNDILIMELKNASLQDQGDYVCLAQDR KTKKRHCVVRLTVLERVAPTITGNLENQTTSIGESIEVSTASGNPPQIMWFK DNETLVEDSGIVLKDGNRNLTIIRVRKEDEGLYTCQACSVLGCACVEAFFIIEG AQEKTNLEIILVGTAVIAMFFWLLLVIILRTVKRANGGELKTGYLSIVMDPDEL PLDEHCERLPYDASKWEFPRDRLKLGKPLGRGAFGQVIEADAFGIDKTATCRT VAVKMLKEGATHSEHRALMSELKILIHGHHLNVVNLGACTKPGGPLMVIVE FCKFGNLSTYLRSKRNEFVYPYKTKGARFRQGDYVGAIPVDLKRRLDSITSSQS SASSGFVEEKSLSDVEEEEAPEDLYKDFTLEHLICYSFQVAKGMEFLASRKCIH RDLAARNILLSEKNVVKICDFGLARDIYKDPDYVRKGDARLPLKWMAPETIFD RVYTIQSDVWSFGVLLWEIFSLGASPYPGVKIDEEFCRRLKEGTRMRAPDYTTTP EMYQTMDCWHGEPQRPTFSELVEHLGNLLQANAQQDGKDYIVLPISETLSM EEDSGLSLPTSPVSCMEEEEEVCDPKFHYDNTAGISQYLQNSKRKSRPVSVKTFE DIPLEEPEVKVIPDDNQTDSGMVLASEELKTLEDRTKLSPSFGGMVPSKSRRESVA SEGSNQTSQYQSGYHSDDTDTTVYSSEEAECLKLIEIGVQTGSTAQILQPDSGTT LSSPPV

Figure 16 cont.

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PROTEIN	SEQ ID NO	SEQUENCE
VEGFR3 (homo sapiens) NCBI Ref No: P35916 Tyr25-Ile776 & Ser473-Ile776	387	MQRGAALCLRLWLCLGLLDGLVSGYSMTPTLNITEESHVIDTGDSLISISC RGQHPLEWAWPGAQEAPATGDKDSED TG VVRDCEGTDARPYCKVLLLHE VHANDTGSYVCYYKYIKARIEGTTAASSYVFVRDFEQPFINKPDTLLVNRK DAMWVPCLV SIPGLNVT LRSQSSVL WPDGQEVVWDDRRGMLVSTPLLHD ALYLQCETT WGDQDFLSNPFLV HITGNEL YDIQLLPRKSLELLVGEKLVN CTVWAEFNSGVTFDWDYPGKQAERGK WVPERRSQQTHTLSSILTIHNVS QHDLGSYVCKANNGIQRFRESTEVI VHENPFISVEWLKGPILEATAGDELV KLPVKLAAYPPPEFQWYKDGKALSGRHSPHALVLKEVTEASTGTYTLLAL WNSAAGLRRNISLELVVNVPPIHEKEASSPSIYSRHSRQALTCTAYGVPLP LSIQWHWRPWPCKMFAQRSLRRRQQQDLMPQCRDWRAVTTQDAVNPIE SLDTWTEFVEGKNKTVSKLVIQNANVSAMYKCVVSNKVGQDERLIYFYV TTIPDGFTIESKPSSEELLEGPVLLSCQADSYKYEHLRWYRLNLSTLHDAH GNPLLLDCKNVHLFATPLAASLEEVAPGARHATLSLSIPRAPEHEGHYVC EVQDRRSHDKHKHKYLSVQALEAPRLTQNLTDLLVNVSDSLEMQCLVA GAHAPSIVWYKDERLLEEKSGVDLADSNQKLSIQRVREEDAGRYLCSVCN AKGCVNSSASVAVEGSEDKGSM EIVLVGTGVIAVFFVWLLLLIFCNMRRP AHADIKTG YLSIIMDPGEVPLEEQCEYLSYDASQWEFP RERLHLGRVLGYG AFGKVVEASAFGIHKGSSCDTVAVKMLKEGATASEHRALMSELKILIHIGN HLNVVNLGACTKPQGPLMVIVEFCKYGNLSNFLRAKRDAFSPCAEKSP QRGRFRAMVELARLDRRRPGSSDRVLFARFSKTEGGARRASPDQEAEDLW LSPLTMEDLV CYSFQVARGMEFLASRKCIHRDLAARNILLS SEDSVVKICDF GLARDIYKDPDYVRKGSARLPLKWMAPESIFDKVYTTQSDVWSFGVLLW EIFSLGASPYPGVQINEEFCQRLRDGTRMRAPELATPAIRRIMLNCWSGDPK ARPAFSELVEILGDLLQGRGLQEEEEVCMAPRSSQSSEEGSFSQVSTMALHI AQADAEDSPPSLQRHSLAARYYNWVSFPGCLARGAETRGS SRMKTFEEFP MTPTTYKGSVDNQTD SGMVLASEEFEQIESRHRQESGFSCKGPGQNVAVT RAHPDSQGRRRRPERGARGGQVFYNSEY GELSEPSEEDHCSPSARVTFTD NSY
PDGFR alpha (homo sapiens) NCBI Ref No: P16234 Met1-Glu524	388	MGTSHPAFLVLGCLLTGLSLILCQLSLPSILPNENEKV VQLNSSFSLRFCGES EVSWQYPMSEEESSDVEIRNEENNSGLFVTVLEVSSASAHTGLYTCYYN HTQTEENELEGRHIYIYVDPDVA FVPLGMTDYL VIVEDDDSAIPCRITTD ETPVTLHNSEGVVPASYDSRQGFNGTFTVGPYICEATVKGKKFQTIPFNVY ALKATSELDEMEALKTVYKSGETIVVTC AVFNNEVVDLQWYTPGEVKG KGITMLEEIKVPSIKLVYTLTVPEATVKDSGDYEC AARQATREVKEMKKV TISVHEKGFIEIKPTFSQLEAVNLHEVKHFVVEVRA YPPPRISWLKNNLTIE NLTEITTDVEKIQEIRYRSKLLIRAKEEDSGHYTIVA QNEDAVKSYTFELL TQVPSSILDLDVDDHHGSTGGQTVRCTAEGTPLPDIEWMICKDIKKCNNETS WTILANNVSNITIEHSRDRSTVEGRVTF AKVEETIAVRCLAKNLLGAENRE LKLVAPTLRSELTVA AAVLVLLVIVVLSLVLVVIWKQKPRY EIRWRVIESISP DGHEYIYVDPMQLPYDSRWEFPRDGLVLGRVLGSGAFGKVVEGTAYGLS RSQPV MKVA VKMLKPTARSSEKQALMSELKIMTHLGPHLNI VNLGACTK SGPIYIITEYCFYGD LVNYLHKNRDSFLSHHPEKPKKELDIFGLNPADESTRS YVILSFENNGDYMDMKQADTTQYVPMLEKKEVSKYS DIQRSLYDRPASY KKKSMLDSEVKNLLSDDNSEGLTLLDLLSFTYQVARGMEFLASKNCVHRD LAARNVLLAQGKIVKICDFGLARDIMHDSNYVSKGSTFLPVKWMAPESIFD NLYTTLSDVWSYGILLWEIFSLGGTPYPGMMVDSTFY NIKISGYRMAKPD HATSEVYEIMVKCWNSEPEKRPSFYHLSEIVENLLPGQYKKS YEKIHLDLFL KSDHPAVARMRVSDSNAYIGVTYKNEEDKLKDWEGGLDEQRLSADSGYI IPLPDIDPVPEEEDLGKRNHRHSSQTSEESA IETGSSSSTFIKREDETIEDIDMM DDIGIDSSDLVEDSFL

Figure 16 cont.

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PROTEIN	SEQ ID NO	SEQUENCE
PDGFR beta (homo sapiens) NCBI Ref No: P09619 Leu33-Phe530 (Glu241Asp)	389	MRLPGAMPALALKGELLLL SLLLLLEPQISQGLVVTTPPGPELVNVS STFVLTCGSAPVWVERMSQEPPQEMAKAQDGTFSVLTLTNLTGL DTGEYFCTHNSRGLTDERKRLYIFVPDPTVGFLPNDAAELFILT EITEITIPCRVTD PQLVVT LHEKKGDVALPVPYDHQRGFGSIFEDRSY ICKTTIGDREVDSDAYYVYRLQVSSINVS VNAVQT VVRQGENITLM CIVIGNEVVNFETYPRKESGRLVEPVTDFLLDMPYHIRSILHIPS AE LED SGTYTCNVTESVNDHQDEKAINITV VESGYVRLLG EVGTLQFA ELHRSRTLQVVF EAYPPPTVLWFKDNRTLGDSSAGEIALSTRNVSET RYVSELTLVRVKVAEAGHYTMRAFHEDA EVQLSFQLQINVPVRVL ELSESHPD SGEQTVRCRGRGMPQPNIIWSACRDLKRCPRELPPTLLG NSSEESQLETNVTY WEEEQEFVVSTLRLQHVD RPLSVRCTLRNA VGQDTQEVIVVPHSLPFKVVVISAILALVVLTIISLIILIMLWQKKPRY EIRWKVIESVSSDGHEYIYVDPMQLPYDSTWELPRDQLVLGRTLGS GAFGQVVEATAHGLSHSQATMKVAVKMLKSTAR SSEQALMSEL KIMSHLGPHLNVVNLLGACTKGGPIYIITEYCRYGDLVDYLHRNKH TFLQHHS DKRRPPSAELYSNALPVGLPLSHVSLTGESDGGYMDMS KDESVDYVPMLDMKGDVKYADIESSNYMAPYDNYVPSAPERTCR ATLINESPVLSYMDLVGFSYQVANGMEFLASKNCVHRDLAARNVL ICEGKLVKICDFGLARDIMRDSNYISKGSTFLPLKWMAPESIFNSLY TTLSDVVSFGILLWEIFTLGGTPYPELPMNEQFYNAIKRGYRMAQP AHASDEIYEIMQKCWEEKFEIRPPFSQLVLLERLLGEGYKKKYQQ VDEEFLRSDHPAILRSQARLPGFHGLRSPDTS SVLYTAVQPNEGDN DYIIPLPDPKPEVADEGPLEGSPSLASSTLNEVNTSSTISCDSPLEPQD EPEPEPQLELQVEPEPELEQLPD SGCPAPRAEAEDSFL
VEGFR1 (homo sapiens) NCBI Ref No: AAC50060 Ser27-His687	390	MVS YWDTGVLLCALLSCLLLTGSSSGSKLKDPELSLKGTQHIMQA GQTLHLQCRGEAAHKWSLPEMVSKESERLSITKSACGRNGKQFCST LTLNTAQANHTGFYSCKYLAVPTSKKKETESAIYIFISDTGRPFVEM YSEIPEIIHMTGRELVIPCRVTSPNITVTLKKFPLDTLIPDGKRIIWD S RKGFIISNATYKEIGLLTCEATVNGHLYKTNYLTHRQTNTIIDVQIST PRPVKLLRGHTLVNCTATTPLNTRVQMTWSYPDEKNKRASVRRR IDQSN SHANIFYSVLTIDKMQNKDKGLYTCRVRSGPSFKSVNTSVHI YDKAFITVKHRKQVLETVAGKRSYRLSMKVKA FPSPEVVWLKD GLPATEKSARYLTRGYSLI IKDVTEEDAGNYTILLSIKQSNVFNLT ATLIVNVK PQIYEKAVSSFPDPALYPLGSRQILTCTAYGIPQPTIKWF WHPCNHNHSEARCD FCSNNEESFILDADSNMGNRIESITQRMAIIEG KNKMASTLVVADSRISGIYICIASNKVGT VGRNISFYITDVPNGFHV NLEKMPTEGEDLKL SCTVNKFLYRDVTWILLRTVNNRTMHYSISK QKMAITKEHSITLNLTIMNVSLQDSGTYACRARNVYTGEIILQKKEI TIRGEHCNKKA VFSRISKFKSTRNDCTTQSNVKH

Figure 16 cont.

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PROTEIN	SEQ ID NO	SEQUENCE
ErbB2/Her2 (homo sapiens) NCBI Ref No: NP_004439	391	MELAAALCRWGLLLALLPPGAASTQVCTGTDMLRLPASPETHLDMRLHL YQGCQVVQGNLELTYPNTASLSFLQDIQEVQGYVLIHNNQVRQVPLQRL RIVRGTLQFEDNYALAVLDNGDPLNNTTPVTGASPGGLRELQLRSLTEILK GGVLIQRNPQLCYQDTILWKDIFHKNNQLALTLIDTNRSRACHPCSPMCKG SRCWGESSEDCQSLTRTVCAAGGCARCKGPLPTDCCHEQCAAGCTGPKHSD CLACLFHNFHSGICELHCPALVTYNTDTFESMPNPEGRYTFGASCVTACPIN YLSTDVGSCTLVCPHLNQEVTAEDGTQRCEKCSKPCARVCYGLGMEHLRE VRAVTSANIQEFAGCKKIFGSLAFLPESFDGDPASNTAPLQPEQLQVFETLE EITGYLYISAWPDSLPLSVFQNLQVIRGRILHNGAYSLLTQGLGISWLGLR SLRELGSGLALIHNNHLCFVHTVPWDQLFRNPHQALLHTANRPEDECVG EGLACHQLCARGHCWGPQTQCVNCSQFLRGQECVEECRVLQGLPREYV NARHCLPCHPECQPQNGSVTCFGPEADQCVACAHYKDPFVCARCPGKVK PDLSPYMPIWKFPEDEGACQPCPINCTHSCVDLDDKGCPEAQRASPLTSISA VVGILLVVVLGVVFGILIKRRQKIRKYTMRRLLQETELVEPLTPSGAMPN QAQMRILKETELRKVKVLGSGAFGTIVYKGIWIPDGENVKIPVAIKVLRENT SPKANKEILDEAYVMAGVGSPPYVSRLLGICLTSTVQLVTLMPYGCLLDH VRENRGRLGSQDLLNWCMIQAKGMSYLEDVRLVHRDLAARNVLVKSPN HVKITDFGLARLLDIDETEHADGGKVPIKWMALLESILRRRFTHQSDVWS YGVTVWELMTFGAKPYDGIPAREIPDLLEKGERLPQPPICTIDVYMIMVKC WMIDSECRPRFRELVSFESRMARDPQRFVVIQNELDGPASPLDSTFYRSLLE DDDMGDLVDAAEYLVPPQGGFFCPDPAPGAGGMVHHRHRSSTRSGGGDL TLGLEPSEEEAPRSPLAPSEGAGSDVFDGDLGMGAAGLQSLPTHDPSPQLQ RYSEDPTVPLPSETDGYVAPLTCSPQPEYVNQPDVVRPQPPSPREGPLPAARP AGATLERPKTLPSPGKNGVVKDVFAGGAVENPEYLTQGGGAAPQPHPPPA FSPAFDNLYYWDQDPPERGAPPSTFKGTPTAENPEYLGLDVVPV
HGFR (cMet) (homo sapiens) NCBI Ref No: P08581 HGFR alpha (Glu25-Arg307) HGFR beta (Ser308-Thr932)	392	MKAPAVLAPGILVLLFTLVQRSNGECKEALAKSEMNVNMKYQLPNFTAET PIQNVILHEHHIFLGATNYIYVLNEEDLQKVAEYKTGPVLEHPCFPCQDCS SKANLSGGVWKDNINMALVVDITYDDQLISCGSVNRGTCQRHVFPNHT ADIQSEVHCIFSPQIEEPSQCPDCVVSALGAKVLSVVKDRFINFFVGNINSS YFPDHPHLSISVRRLETKDGFMTLDQSYIDVLPEDFDSYPIKYVHAFESN NFIYFLTVQRETLDQTFHTRIIRFCSINSGLHSYMEMPLECILTEKRKKRST KKEVFNILQAAYVSKPGAQLARQIGASLNDLILFGVFAQSKPDSAEPMDRS AMCAPIKYVNDFFNKIVNKNVVRCLQHFYGPNEHCFNRTLLRNSSGCE ARRDEYRTEFTTALQVRDLFMGQFSEVLLTSISTFIKGDLTIANLGTSEGRF MQVVVSRSGPSTPHVNFLLDSDHPVSPEVIVEHTLNQNGYTLVITGKKITKIP LNGLGCRHFQSCSQCLSAPPFVQCGWCHDKCVRSEELSGTWTQQICLPAI YKVFNPNSAPLEGTRLTICGWDFGFRNNKFDLKKTRVLLGNESCTLTSE STMNTLKCTVGPAMNKHFNMSIIISNGHGTQYSTFSYVDPVITSISPKYGP MAGGTLLTLTGNYLNSGNSRHISIGKCTCLKSVSNSILECYTPAQTISTEF AVKLIKIDLANRETSIFSYPREDPIVYIEHPTKSFISGGSTITGVGNLNSVSVPR MVINVHEAGRNFVACQHRNSNEIICCTTPSLQQLNLQLPLKTKAFFMLDGI LSKYFDLIYVHNPVFKPFKPVMMISMGNNVLEIKGNDIDPEAVKGEVLKV GNKSCENIHLHSEAVLCTVPNDLLKLNSLNEIWKQAISSVTLGKVVVQPD QNFTGLIAGVVSISTALLLLLGFFLWLKKRKQIKDLGSELVRYDARVHTPH LDRLVSARSVSPTTEMVSNESVDYRATFPEDQFPNSSQNGSCRQVQYPLTD MSPILTSGDSDISSPLLQNTVHIDLSALNPQLVQAVQHVIGPSSLIVHFNEV IGRGHFGCVYHGTLLDNDGKKIHCACVKSLSNRITDIGEVSQFLTEGIIMKDFS HPNVLSLLGICLRSEGSPLVLPYMKHGDRLNFIRNETHNPTVKDLIGFGLQ VAKGMKYLASKKFVHRDLAARNCMLDEKFTVKVADFLARDMYDKEY YSVHNKTGAKLPVKWMALESLLQTKFTTKSDVWSFGVLLWELMTRGAPP YPDVNTFDITVYLLQGRRLQLPEYCPDPLYEVMKLCWHPKAEMRPSFSEL VSRISAIFFSTFGEHYVHVNATYVNVKCVAPYPSLLSSEDNADDEVDTRPAS FWETS

Figure 16 cont.

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PROTEIN	SEQ ID NO	SEQUENCE
TNF sRI (homo sapiens) NCBI Ref No: P19438 Leu30-Thr211 & Asp41-Thr211	393	MGLSTVPDLLLLPLVLELLVGIYPSGVIGLVPHLGDREKRDSVCPQG KYIHPQNNSICCTKCHKGTLYLNDPCPGQDQDTCRECESGSFTASE NHLRHCLSCSKCRKEMGQVEISSCTVDRDTCVCGCRKNQYRHYWSE NLFQCFNCSLCLNGTVHLSCQEKQNTVCTCHAGFFLRENECVSCSN CKKSLECTKLCLPQIENVKGTEDSGTTVLLPLVIFGLCLLSLLFIGL MYRYQRWWSKLYSIVCGKSTPEKEGELEGTITTKPLAPNPSFSPTPGF TPTLGFSPVPSSTFTSSSTYTPGDCPNFAAPRREVAPPYQGADPILAT ALASDPIPNPLQKWEDSAHKPQSLDTPATLYAVVENVPPLRWK EFVRRLLGSLDHEIDRLQLNGRCLREAQYSMLATWRRRTPRREATL ELLGRVLRDMDLLGCLEDIEEALCGPAALPPAPSLLR
CTLA-4 (homo sapiens) NCBI Ref No: P16410 Ala37-Phe162	394	MACLGFQRHKAQLNLATRTWPCTLLFFLLFIPVFCKAMHVAQPAV VLASSRGIAFVCEYASPGKATEVRVTVLRQADSQVTEVCAATYM MGNELTFLDDSICTGTSSGNQVNLTIQGLRAMDTGLYICKVELMYP PPYYLGIGNGTQIYVIDPEPCPDSDFLLWILAAVSSGLFFYSFLLTAV LSKMLKKRSPLTTGVYVKMPTEPECEKQFQPYFIPIN
CD47 (homo sapiens) NCBI Ref No: Q08722	395	MWPLVAALLLGSACCGSAQLLFNKTKSVEFTFCNDTVVIPCFVTN MEAQNTTEVYVKWKFGRDIYTFDGLNKSSTVPTDFSSAKIEVSQL LKGDAKMDKSDAVSHTGNYTCEVTELTREGETHIELKYRVVSWF SPNENILIVIFPIFAILLFWGQFGIKTLKYRSGGMDEKTIALLVAGLVI TVVIVGAILFVPGEYSLKNATGLGLIVTSTGILILLHYVVFSTAIGLT SFVIAILVIQVIAIYLA VVGLSLCIAACIPMHGPLLISGLSILALAQLLG LVYMKFVASNQKTIQPPRKA VEEPLNAFKESKGMNDE
PD-L1 (homo sapiens) NCBI Ref No: Q9NZQ7	396	MRIFAVFIFMTYWHLNNAFTVTVPKDLYVVEYGSNMTIECKFPVEK QLDLAALIVYWEMEDKNIIQFVHGEEDLKVQHSSYRQARLLKDQ LSLGNAALQITDVKLQDAGVYRCMISYGGADYKRITVKVNAPYNK INQRILVVDPTSEHELTCQAEGYPKAEVIWTSSDHQVLSGKTTTTN SKREEKLFNVTSTLRINTTTNEIFYCTFRRLDPEENHTAELVPELPL AHPPNERTHLVILGAILLCLGVALTFIFRLRKGRMMDVKKCGIQDT NSKKQSDTHLEET

Figure 16 cont.

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SEQ ID NO:	Peptide No.	Amino acid sequence
3	1	ADNFS ~~L~~ HDALSGSGNPNPQG
4	2	SGSGNPNPQGWPGAWGNQPA
5	3	WPGAWGNQPAGAGGYPGASY
6	4	GAGGYPGASYPGAYPGQAPP
7	5	PGAYPGQAPPGAYPGQAPPG
8	6	GAYPGQAPPGAYPGAPGAYP
9	7	AYPGAPGAYPGAPAPGVYPG
10	8	GAPAPGVYPGPPSGPGAYPS
11	9	PPSGPGAYPSSGQPSATGAY
12	10	SGQPSATGAYPATGPYGAPA
13	11	PATGPYGAPAGPLIVPYNLP
14	12	GPLIVPYNLPLPGGVVPRML
15	13	LPGGVVPRMLITILGTVKPN
16	14	ITILGTVKPNANRIALDFQR
17	15	ANRIALDFQRGNDVAFHFNP
18	16	GNDVAFHFNPFRFNENNRRI
19	17	RFNENNRRIVCNTKLDNNW
20	18	VCNTKLDNNWGREERQSVFP
21	19	GREERQSVFPFESGKPFKIQ
22	20	FESGKPFKIQVLVEPDHFKV
23	21	VLVEPDHFKVAVNDAHLLQY
24	22	AVNDAHLLQYNHRVKKLNEI
25	23	NHRVKKLNEISKLGISGDID
26	24	SKLGISGDIDLTASAYTMI

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peptide_4  ----GAGGYPGASYPGAYPGQAPP--
peptide_5  -----PGAYPGQAPPGAYPGQAPPG-
peptide_6  -----GAYPGQAPPGAYPGAPGAYP
peptide_7  AYPGAPGAYPGAPAPGVYPG-----
              * . ***      ** . ***

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FIG. 17

Name	Sequence	SEQ ID NO:	Name	Sequence	SEQ ID NO:
V _H _CDR1_1	GYTFTNY	27	V _H _CDR1_27	GYTFTSYD	591
V _H _CDR1_2	GYSFTNY	28	V _H _CDR1_28	GYSFTNYI	592
V _H _CDR1_3	GYTFTDY	29	V _H _CDR1_29	GYTFRSYD	593
V _H _CDR1_4	GYKFKTY	30	V _H _CDR1_30	GFTFSNFW	594
V _H _CDR1_5	GYTFTTY	31	V _H _CDR1_31	GYTFTSYD	595
V _H _CDR1_6	GFAFSSY	32	V _H _CDR1_32	EYAFNNYM	596
V _H _CDR1_7	GYTFTDF	33	V _H _CDR1_33	GYSFTGYT	597
V _H _CDR1_8	GYAFTTY	34	V _H _CDR1_34	GYTFTNYW	598
V _H _CDR1_9	GFTFSSY	35	V _H _CDR1_35	SSVTY	599
V _H _CDR1_10	GYTFTNYG	36	V _H _CDR1_36	GYTFNNYW	600
V _H _CDR1_11	GYTFTNFG	37	V _H _CDR1_37	GYTFTNYW	601
V _H _CDR1_12	GFTFSSYA	38	V _H _CDR1_38	GFSLTSYG	602
V _H _CDR1_13	GFSLSSTSGMG	39	V _H _CDR1_39	GYTFTNYG	603
V _H _CDR1_14	GFTFSNYG	40	V _H _CDR1_40	GFSLTSYG	604
V _H _CDR1_15	GYIFTNYG	41	V _H _CDR1_41	GFSLINYG	605
V _H _CDR1_16	GNTFTDHN	42	V _H _CDR1_42	GFSLTSYG	606
V _H _CDR1_17	GYTFTSYW	43	V _H _CDR1_43	GFSLSSYG	607
V _H _CDR1_18	GFSLSSTFGMG	44	V _H _CDR1_44	GYSFTNYW	608
V _H _CDR1_19	GYTFTSYD	245	V _H _CDR1_45	GYSFTSYW	609
V _H _CDR1_20	GFTFSNYW	246	V _H _CDR1_46	GYSITSGYY	610
V _H _CDR1_21	GFSLTSY	397	V _H _CDR1_47	GFSLSSTFGMG	611
V _H _CDR1_22	GYTFTSY	398	V _H _CDR1_48	GYSITSGYY	612
V _H _CDR1_23	GYTFSDY	399	V _H _CDR1_49	GFNIKDYY	613
V _H _CDR1_24	GFTFSNYW	588	V _H _CDR1_50	RYTFTDYN	614
V _H _CDR1_25	GYTFTSYV	589	V _H _CDR1_51	GYTFTIFG	615
V _H _CDR1_26	GYTFTSYD	590			

FIG. 18

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Name	Sequence	SEQ ID NO:	Name	Sequence	SEQ ID NO:
V _H _CDR2_1	NTNTGE	45	V _H _CDR2_28	IYPGDGST	618
V _H _CDR2_2	IYPGSGNT	46	V _H _CDR2_29	IYPGDGST	619
V _H _CDR2_3	IYPGTGNT	47	V _H _CDR2_30	INPYNDGT	620
V _H _CDR2_4	INTYSGVP	48	V _H _CDR2_31	IFPGEGIS	621
V _H _CDR2_5	ISDGGVYT	49	V _H _CDR2_32	IRLKSNNYAT	622
V _H _CDR2_6	INPKNGGI	50	V _H _CDR2_33	IFPGDGTT	623
V _H _CDR2_7	VNTYSGVP	51	V _H _CDR2_34	INPGSGAT	624
V _H _CDR2_8	IYPGSNDT	52	V _H _CDR2_35	INPYNGGT	625
V _H _CDR2_9	ISDGGIYT	53	V _H _CDR2_36	FLPGDGSS	626
V _H _CDR2_10	INTYTGE	54	V _H _CDR2_37	ATS	627
V _H _CDR2_11	ISSGGDT	55	V _H _CDR2_38	IDPSDSET	628
V _H _CDR2_12	IWWDDDK	56	V _H _CDR2_39	IDPSDSET	629
V _H _CDR2_13	ISSGGSYT	57	V _H _CDR2_40	IWAGGST	630
V _H _CDR2_14	IYPYNGGT	58	V _H _CDR2_41	INTNTGEP	631
V _H _CDR2_15	ISSGGST	59	V _H _CDR2_42	IWAGGST	632
V _H _CDR2_16	IYPGSSSI	60	V _H _CDR2_43	IWSGGST	633
V _H _CDR2_17	IYPGDGST	247	V _H _CDR2_44	IWAGGST	634
V _H _CDR2_18	IRLKSNNYAT	248	V _H _CDR2_45	IWAGGST	635
V _H _CDR2_19	INTNTGES	400	V _H _CDR2_46	IDPSDSET	636
V _H _CDR2_20	INTHSGVP	401	V _H _CDR2_47	IDPSDSET	637
V _H _CDR2_21	IWSGGST	402	V _H _CDR2_48	ISYDGRN	638
V _H _CDR2_22	IDPSDSET	403	V _H _CDR2_49	IWWDDDK	639
V _H _CDR2_23	IHPNSGST	404	V _H _CDR2_50	ISYDGRN	640
V _H _CDR2_24	INPNNGGT	405	V _H _CDR2_51	IYPEDDET	641
V _H _CDR2_25	IYPVSVNT	406	V _H _CDR2_52	IYPNNGGT	642
V _H _CDR2_26	LRLKSNNYAT	616	V _H _CDR2_53	VNTYTGE	643
V _H _CDR2_27	INPYNDGT	617			

FIG. 19

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Name	Sequence	SEQ ID NO:	Name	Sequence	SEQ ID NO:
V _H _CDR3_1	APYDNFFAY	61	V _H _CDR3_32	AYLDY	415
V _H _CDR3_2	STAPGGFDV	62	V _H _CDR3_33	AKSPDGYDVAWFGY	416
V _H _CDR3_3	ARFAYYYGSGGYFDY	63	V _H _CDR3_34	TRHYGFPYWYFDV	644
V _H _CDR3_4	ARDGNYGDPMDY	64	V _H _CDR3_35	ARLLFFYYAMDY	645
V _H _CDR3_5	STPYEYDGAY	65	V _H _CDR3_36	AREAASNAMDY	646
V _H _CDR3_6	VRDGGY	66	V _H _CDR3_37	AREAASNAMDY	647
V _H _CDR3_7	ARGPYAMDY	67	V _H _CDR3_38	ARLLFFYYAMDY	648
V _H _CDR3_8	TSGYGFPY	68	V _H _CDR3_39	AREATAGAMDY	649
V _H _CDR3_9	ANYFGCSGWFFDV	69	V _H _CDR3_40	TRHYGFPYWYFDV	650
V _H _CDR3_10	ARWGGYAGDYIAMDF	70	V _H _CDR3_41	AREGAGSWFAY	651
V _H _CDR3_11	ARWGGYDGDYYAMDY	71	V _H _CDR3_42	TYNDLGY	652
V _H _CDR3_12	ARWGGYAGDYIAMDY	72	V _H _CDR3_43	ARKDDYYGSSPYALDY	653
V _H _CDR3_13	ASYGNSLFDY	73	V _H _CDR3_44	VRDDYDSY	654
V _H _CDR3_14	VRYTMDY	74	V _H _CDR3_45	QQWSSNPLT	655
V _H _CDR3_15	ARNLYDGSYGYIAMDY	75	V _H _CDR3_46	ARGDYYYGTRGPMDY	656
V _H _CDR3_16	ARHAHYGVSPYYFDY	76	V _H _CDR3_47	ARWGAMDY	657
V _H _CDR3_17	AKFGNYVGAMDY	77	V _H _CDR3_48	ARDRASLLRPGAMDY	658
V _H _CDR3_18	ARGEYDYLAWFAY	78	V _H _CDR3_49	ARLDYDYDEDY	659
V _H _CDR3_19	TRFTTVVEMDY	79	V _H _CDR3_50	ASPPSGYDYDVFAFAS	660
V _H _CDR3_20	ARWGY	80	V _H _CDR3_51	ARIYYGRGYAMDY	661
V _H _CDR3_21	ARIDYGDYVGFAY	81	V _H _CDR3_52	ASPPSGYDYDVFAFAY	662
V _H _CDR3_22	AREAASNAMDY	249	V _H _CDR3_53	AKPPYDYDGAWFAY	663
V _H _CDR3_23	TRHYGFPYWYFDV	250	V _H _CDR3_54	ATGRPDY	664
V _H _CDR3_24	ARYPMDY	407	V _H _CDR3_55	AKGRPDY	665
V _H _CDR3_25	QPGGVTGTLTT	408	V _H _CDR3_56	AGYDFLWYFDV	666
V _H _CDR3_26	TRDGNDGDAMDND	409	V _H _CDR3_57	ARIDYGDYVGFAY	667
V _H _CDR3_27	AKGPYDYDLGWFAFAY	410	V _H _CDR3_58	AGYDFLWYFDV	668
V _H _CDR3_28	ARHGYYDY	411	V _H _CDR3_59	ARSGGYYVWFAFAY	669
V _H _CDR3_29	TRWGIYYIARDY	412	V _H _CDR3_60	ARSYYDGSYDAMDY	670
V _H _CDR3_30	AVPYEYDGAY	413	V _H _CDR3_61	ARGWFAFAY	671
V _H _CDR3_31	ATPYEYDGAY	414			

FIG. 20

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Name	Sequence	SEQ ID NO:	Name	Sequence	SEQ ID NO:
V _L _CDR1_1	RSSKSLLYKDGKTYLN	82	V _L _CDR1_31	QSLHSDGKTY	425
V _L _CDR1_2	KSLHSDGITY	83	V _L _CDR1_32	QDVRTA	426
V _L _CDR1_3	QGINSN	84	V _L _CDR1_33	ESVDSYGNSF	672
V _L _CDR1_4	QSLLYTNGKTY	85	V _L _CDR1_34	QGINSN	673
V _L _CDR1_5	QSLFSDGKTY	86	V _L _CDR1_35	KSVSTSGYSY	674
V _L _CDR1_6	QSIVHNNGNTY	87	V _L _CDR1_36	KSVSTSGYSY	675
V _L _CDR1_7	QGINNY	88	V _L _CDR1_37	QGISSN	676
V _L _CDR1_8	QNIYIW	89	V _L _CDR1_38	KSVSTSGYSC	677
V _L _CDR1_9	QDISNY	90	V _L _CDR1_39	ESVDSYGNSF	678
V _L _CDR1_10	QSIVHNSGNTY	91	V _L _CDR1_40	KSVSTSGYSY	679
V _L _CDR1_11	QSVLYSSNQKNY	92	V _L _CDR1_41	QSLLYSDGKTY	680
V _L _CDR1_12	QSVLYSSSQKNY	93	V _L _CDR1_42	ESVENHVNFSF	681
V _L _CDR1_13	QSLVHNSGNTY	94	V _L _CDR1_43	TGAVTTSNY	682
V _L _CDR1_14	TGAVTTSNY	95	V _L _CDR1_44	TYMYWYQQ	683
V _L _CDR1_15	KSLLHTNGITF	96	V _L _CDR1_45	ESLDNSGISF	684
V _L _CDR1_16	QSLNSSNQKNY	97	V _L _CDR1_46	QDVSTT	685
V _L _CDR1_17	QNINVW	98	V _L _CDR1_47	QNVGIN	686
V _L _CDR1_18	IDIDDD	99	V _L _CDR1_48	QSLDSDGKTY	687
V _L _CDR1_19	QDIVHSSGNTY	100	V _L _CDR1_49	GNIHNY	688
V _L _CDR1_20	KSLLYSNGITY	101	V _L _CDR1_50	SSVTY	689
V _L _CDR1_21	KSVSTSGYSY	251	V _L _CDR1_51	GNIHNY	690
V _L _CDR1_22	ESVDSYGNSF	252	V _L _CDR1_52	QSVSSD	691
V _L _CDR1_23	QSLLYSNGKTY	417	V _L _CDR1_53	QDVSTA	692
V _L _CDR1_24	QSLLYTDGKTY	418	V _L _CDR1_54	QDVSTA	693
V _L _CDR1_25	QSVSND	419	V _L _CDR1_55	QSLLYINGKTY	694
V _L _CDR1_26	QGISNY	420	V _L _CDR1_56	QGINSN	695
V _L _CDR1_27	QDVSTA	421	V _L _CDR1_57	QSLLYINGKTY	696
V _L _CDR1_28	QNVGTN	422	V _L _CDR1_58	RSLLHSNGYTY	697
V _L _CDR1_29	QSLFSDGKTY	423	V _L _CDR1_59	QGISNY	698
V _L _CDR1_30	QNINIW	424	V _L _CDR1_60	RSLLDSDGKTY	699

FIG. 21

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Name	Sequence	SEQ ID NO:	Name	Sequence	SEQ ID NO:
V _L _CDR2_1	LMSTHAS	102	V _L _CDR2_24	LAS	705
V _L _CDR2_2	RMS	103	V _L _CDR2_25	LAS	706
V _L _CDR2_3	HAT	104	V _L _CDR2_26	LAS	707
V _L _CDR2_4	LLS	105	V _L _CDR2_27	LVS	708
V _L _CDR2_5	LVS	106	V _L _CDR2_28	RAS	709
V _L _CDR2_6	KVS	107	V _L _CDR2_29	GTN	710
V _L _CDR2_7	YAS	108	V _L _CDR2_30	SGVPARF	711
V _L _CDR2_8	KAS	109	V _L _CDR2_31	AAS	712
V _L _CDR2_9	YTS	110	V _L _CDR2_32	WAS	713
V _L _CDR2_10	WAS	111	V _L _CDR2_33	SAS	714
V _L _CDR2_11	GIN	112	V _L _CDR2_34	LVS	715
V _L _CDR2_12	QMS	113	V _L _CDR2_35	NVK	716
V _L _CDR2_13	FAS	114	V _L _CDR2_36	ATS	717
V _L _CDR2_14	EGN	115	V _L _CDR2_37	SAK	718
V _L _CDR2_15	GTN	116	V _L _CDR2_38	FAS	719
V _L _CDR2_16	LAS	253	V _L _CDR2_39	WAS	720
V _L _CDR2_17	LVC	427	V _L _CDR2_40	WAS	721
V _L _CDR2_18	GAS	428	V _L _CDR2_41	LVS	722
V _L _CDR2_19	LAS	700	V _L _CDR2_42	HGT	723
V _L _CDR2_20	HGT	701	V _L _CDR2_43	LVS	724
V _L _CDR2_21	LAS	702	V _L _CDR2_44	RMS	725
V _L _CDR2_22	LAS	703	V _L _CDR2_45	YTS	726
V _L _CDR2_23	YGT	704	V _L _CDR2_46	LVS	727

FIG. 22

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Name	Sequence	SEQ ID NO:	Name	Sequence	SEQ ID NO:
V _L _CDR3_1	QQLVDYPLT	117	V _L _CDR3_29	VQYDQFPWT	729
V _L _CDR3_2	AQMLEFPLT	118	V _L _CDR3_30	QHSRELPLT	730
V _L _CDR3_3	VQYAQFPPT	119	V _L _CDR3_31	QHSRELPLT	731
V _L _CDR3_4	LQSTHFPLT	120	V _L _CDR3_32	VQYDQFPWT	732
V _L _CDR3_5	WQGTHFPLT	121	V _L _CDR3_33	HHSTELPYT	733
V _L _CDR3_6	FQGSHVPLT	122	V _L _CDR3_34	QQNNEDPWT	734
V _L _CDR3_7	QQYSQVPYT	123	V _L _CDR3_35	QHSRELPLT	735
V _L _CDR3_8	LQGQSYPLT	124	V _L _CDR3_36	VQGTHLPT	736
V _L _CDR3_9	QQYSKLPYT	125	V _L _CDR3_37	QQNNEVPYT	737
V _L _CDR3_10	AQMIEFPLT	126	V _L _CDR3_38	ALWYSNHLV	738
V _L _CDR3_11	HQYLSSLT	127	V _L _CDR3_39	ARIYYYGRGYAMDY	739
V _L _CDR3_12	SQSTHVPPT	128	V _L _CDR3_40	QHSKEVPWT	740
V _L _CDR3_13	ALWYSNHWV	129	V _L _CDR3_41	QQHYSPPT	741
V _L _CDR3_14	AQNLELPWT	130	V _L _CDR3_42	QQYNSYPYT	742
V _L _CDR3_15	QQHYSTPYT	131	V _L _CDR3_43	WQGTHFPPT	743
V _L _CDR3_16	QQGQSYPYT	132	V _L _CDR3_44	QHFWSIFPT	744
V _L _CDR3_17	LQSDNKPLT	133	V _L _CDR3_45	QQWSSNPLT	745
V _L _CDR3_18	ALWYSNHLV	134	V _L _CDR3_46	QHFWSLFPT	746
V _L _CDR3_19	FQGSHVPPT	135	V _L _CDR3_47	QHNYISPPT	747
V _L _CDR3_20	QHSRELPLT	254	V _L _CDR3_48	QQHYSTPYT	748
V _L _CDR3_21	QQNNEDPWT	255	V _L _CDR3_49	QQHYNTPYT	749
V _L _CDR3_22	VQGTHFPQT	429	V _L _CDR3_50	LQSTHFPQT	750
V _L _CDR3_23	QQDYTSPYT	430	V _L _CDR3_51	VQYDQFPWT	751
V _L _CDR3_24	QQYSELPYT	431	V _L _CDR3_52	LQSTHFPQT	752
V _L _CDR3_25	QQHYTTPLT	432	V _L _CDR3_53	MQHLEYPYT	753
V _L _CDR3_26	EQYSNFPLT	433	V _L _CDR3_54	QQYSKLPRT	754
V _L _CDR3_27	QQYSSYPWT	434	V _L _CDR3_55	WQGTHFPQT	755
V _L _CDR3_28	QQNNEDPWT	728			

FIG. 23

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Name	Sequence	SEQ ID NO:
V _H -1	QVQLVQSGSELKKPGASVKVSCASGYTFTNYGMNWVRQAPGQGLKWMGW INTNTGEPTYVEEFTGRFVFSLETSTAYLQISSLKAEDTAVYFCAPYDNFFAY WGQGTITVTVSS	136
V _H -2	QVQLVQSGAEVKKPGASVKVSCASGYSTFTNYMHVVRQAPGQRLEWMG WIYPGSGNTNYNEKFQGRVTITADTSASTAYMELSSLRSEDTAVYYCSTAPGG FDVWGQGTITVTVSS	137
V _H -3	QVQLKQSGAELVRPGASVKLSCKASGYTFTDYINWVKQRPQGQGLEWIARIY PGTGNTDYNEKFKGRATLTAEKSSSTAYMQLSSLTSEDSAVYFCARFAYYYGS GGYFDYWGHGTTITVTVSS	138
V _H -4	QIQLVQSGPELKKPGETVKISCKTSGYKFKTYVMSWVKQAPGKALKWMGWI NTYSGVPTYADDFKGRFAFSLETSTASTAYLEIINLKNEDTATYFCARDGNYGD PMDYWGQGTSTVTVSS	139
V _H -5	QIQLVQSGPELKKPGETVKISCKASGYTFTTYGMGWVKQAPGKDLKWMGWI NTYSGVPTYADDFKGRFAFSLETSTASTAYLQISNLKNEDTATYFCSTPYEYDG AYWGQGTITVTVSA	140
V _H -6	EVQLVESGGGLVKPGGSLKLSCAASGFAFSSYAMSWVRQTPEKRLEWVATIS DGGVYTYITDHLVKGRTISRDNEDNLYLQMSHLKSEDTAMYYCVRDGGY WGQGTITVTVSS	141
V _H -7	QIQLVQSGPELKKPGETVKISCKASGYTFTTYAMSWVKQAPGKGLKWMGWIN TYSGVPTYADDFKGRFAFSLETSTASTAYLQINNKNEDTATYFCARGPYAMD YWGQGTSTVTVSS	142
V _H -8	EVQLQQSGPELVKPGASVKISCKASGYTFTDFYINWVKQSHGKSLEWIGDINP KNGGINYNPKFKIKATLTVDKSSSTSYMDLRGLTSEDSAVYYCTSGYGFYWG QGTLVTVSA	143
V _H -9	QIQLVQSGPELKKPGESVKISCKASGYAFTTYGMSWVQQAPGKGLKWMGWV NTYSGVPTCADDKGRFAFSLETSTASTAYLQINNLRNEDTATYFCARGPYAMD YWGQGTSTVTVSS	144
V _H -10	QVQLQQSGPELVKPGASVKISCKASGYTFTDYINWVKQRPQGQGLEWIGWIYP GSNDTKYNEKFKGKATLTVDTSSSTAYMQLGSLTSEDSAVYFCANYFGCSGW FFDVWGTGTTITVTVSS	145
V _H -11	EVQLVESGGGLVKPGGSLKLSCAASGFTFSSYAMSWVRQTPEKRLEWVATISD GGIYTYYPDNVKGRTISRDNKNNLFLQMSHLKSEDTAMYYCVRDGGYWG QGTTITVTVSS	146
V _H -12	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWVKQAPGKGLKWMGWI NTYTGEPSYADDFKGRFAFSLETSTASTAYLQINNKNEDMATYFCARWGGYA GDYYAMDFWGQGTSTVTVSS	147
V _H -13	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWVKQAPGKGLKWMGWI NTYTGEPSYADDFKGRFAFSLETSTASTAYLQINNKNEDMATYFCARWGGYD GDYYAMDYWGQGTSTVTVSS	148
V _H -14	QIQLVQSGPELKKPGETVKISCKASGYTFTNFGMNWVKQAPGKGLKWMGWI NTYTGEPSYADDFKGRFAFSLETSTASTAYLQINNKNEDIATYFCARWGGYAG DYYAMDYWGQGTSTVTVSS	149

FIG. 24

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Name	Sequence	SEQ ID NO:
V _H -15	EVQLLESGGGLVKPGGSLKLSCAASGFTFSSYAMSWVRQTPEKRLEWVASISS GGDTYYPDSPVKGRFTISRDNARNILYLQMSSLRSEDAMYYCASYGNSLFDY WGQGTTLTVSS	150
V _H -16	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWVKQAPGKGLKWMGWI NTYTGEPTYAGDLKGRFAFSLETSASTAYLQINNPKNEDTATYFCVRYTMDY WGQGTSTVTVSS	151
V _H -17	QVTLKESGPGILQPSQTLSTCSFSGFSLSTSGMGVGVWIRQPSGKGLEWLAHIW WDDDKYYNTALKSGLTISKDASKNQVFLKIASMDTADTATYYCARNLYDGS YGYIAMDYWGQGTSTVTVSS	152
V _H -18	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWVKQAPGKGLKWMGWI NTYTGEPTAYADDFKGRFAFSLETSASTAYLQINNPKNEDMATYFCARWGGYD GDYYAMDYWGQGTSTVTVSS	153
V _H -19	EVQLVESGGDLVKPGGSLKLSCAASGFTFSNYGLSWIRQTPDKRLEWVATISS GGSYTYYPDSVKGRFTISRDSAKNTLYLQMSSLRSEDAMYYCARHAHYGV SPYYFDYWGQGTCLTVSS	154
V _H -20	QIQLVQSGPEVKKPGETVKISCKASGYIFTNYGMNWVKQAPGKGLKWMGWI NTYTGEPTYTDDFKGRFAFSLETSASTAYLQINNPKNEDTATYFCAKFGNYVG AMDYWGQGTSTVTVSS	155
V _H -21	EVQLQQSGPELVKPGASVKISCKASGNTFTDHNMHVVKQSHGKSLEWIGYIY PYNGGTGYNQKFKSKATLTVDNSSSTVYMELRSLTSEDSAVYYCARGEYDYL AWFAYWGQGTCLTVSA	156
V _H -22	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWVKQAPGKGLKWMGWI NTYTGEPTYVDDFKGRFAFSLETSASTAYLRINLPKNEDTATYFCAKFGNYVG AMDYWGQGTSTVTVSS	157
V _H -23	EVQLVETGGGLVKPGGSLKLSCAASGFTFSSYAMSWVRQTPEKRLEWVASISS GGSTYYPDSPVKGRFTISRDNARNILYLQMSSLRSEDAMYYCTRFTTVEMDY WGQGTSTVTVSS	158
V _H -24	QVQLQQTGAELVKPGASVKLSCKASGYTFTSYWINWVKQRPQGQGLEWIGNIY PGSSSIYYSEKFKSKATLTVDTSSSTAYMQLSSLTSDDSAVYYCARWGYWGQ GTTLTVSS	159
V _H -25	QVTLKESGPGILQPSQTLSTCSFSGFSLSTFGMGVGVWIRQPSGKGLEWLAHIW WDDDKHYNPALKSRLTISKDTSKNQVFLRIANVDADNATYYCARIDYGDYV GFAYWGQGTCLTVSA	160
V _H -26	QVQLQQSGPELVRPGALVKISCKASGYTFTSYDINWVKQRPQGQGLEWIGWIYP GDGSTKYNEKFKGKATLTADKSSSTAYMQLSSLTSENSAVYFCAREAAASNA MDYWGQGTSTVTVSS	256
V _H -27	EVKLEESGGGLVQPGGSMKLSCVASGFTFSNYWMNWVRQSPEKGLEWVAEI RLKSNNYATHYAESVKGRFTISRDDSKSSVYLQMNNLRAEDTGIYYCTRHGF PYWYFDVWGAGTTVTVSS	257
V _H -28	QIQLVQSGPELTKPGETVKISCKASGYTFTDYGMNWVRQAPGETLKWMGWIN TYTGEPTYADDFKGRFAFSLESSASTAYLQINNPKNEDVATYFCARYPMDYW GQGTSTVTVSS	435
V _H -29	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWVKQAPGKGLKWMGWI NTNTGEPTYAEEFKGRFAFSLETSASTAYLQINNPKNEDTATYFCATGGGNWD FDYWGQGTTLTVSS	436

FIG. 24 cont.

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Name	Sequence	SEQ ID NO:
V _H -30	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWVKQAPGKGLKWMGWI NTNTGEPTYVEEFKGRFAFSLETSASTAYLQINNLIKNEDTATYFCAPYDNFFAY WGQGTLLTVSA	437
V _H -31	QVQLQQSGPELVKPGASVKISCKASGYSTFTNYIHWVKQRPGQGLEWIGWIYP GSGNTNYNEKFKGKATLTADTSSSTNMQLSSLTSEDSAVYYCSTAPGGFDV WGS GTTVTVSS	438
V _H -32	QVQLVQSGAEVKKPGASVKVSKASGYSTFTNYMHVVRQAPGQGLEWMG WIYPGSGNTNYNEKFGQGRVTMTADTSISTAYMELSLRSDDTAVYYCSTAPG GFDVWGQGTTVTVSS	439
V _H -33	QVQLVQSGAEVKKPGASVKVSKASGYSTFTNYIHWVRQAPGQRLEWMGWI YPGSGNTNYNEKFGQGRVTLTADTSASTTYMELSSLRSEDVAVYYCSTAPGGFD VWGQGTTVTVSS	440
V _H -34	QIQLVQSGPDLKKPGETVKISCKASGYTFTTYVMSWVKQAPGKDLKWMGWI NTHSGVPTYADDFKGRFDFSLETSANTAFLQINNLIKNEDTATYFCTRDGNDGD AMDNWGQGTSTTVSS	441
V _H -35	QVQLKQSGPGLVQPSQSLSTCTVSGFSLTSYGVHVRQPPGKGLEWLGVIS GGSTDYNAAFISRLSISKDNSKSKVFFKMNSLQADDTAIYYCAKGPYDYDLGW FAYWGQGTLLTVSA	442
V _H -36	QIQLVQSGPELKKPGETVKISCKASGYTFTTYGMSWVKQAPGKGLKWMAWIN TYSGVPTYADDFKGRFAFSLETSASTAYLQINNLTNEDTATYFCARGPYAMDY WGQGTSTTVSS	443
V _H -37	QVQLQQPGAELVGPSSVKLSCKASGYTFTNYWIHWVKQRPLQGLEWIGNID PSDSETHYNQKFKDKATLTVDKSSSTAYMQLSSLTSEDSAVYYCARHGYDY WGQGTLLTVSS	444
V _H -38	QVQLQQPGAELVKPGASVKLSCKASGYTFTSYWMHWVKQRPGQGLEWIGMI HPNSGSTDYNEKFKNKATLNVDKSSSTAYIQLSSLTSEDSAVYYCTRWGIYYY ARDYWGQGTLLTVSS	445
V _H -39	QIQLVQSGPELKKPGETVKISCKASGYTFTTYGMSWVKQAPGKGLKWMGWIN TYSGVPTYADDFKGRFAFSLETSASTAYLQINNLIKNEDTATYFCAPYEYDGA YWGQGTLLTVSA	446
V _H -40	EVQLQQSGPELVKPGASVKISCKASGYTFTDYIMNWVKQSHGKSLEWIGDIN PNNGGTNYNQKFKGKATLTVDKSSSTAYMELRSLTSEDSAVYYCTSGYGFY WGQGTLLTVSA	447
V _H -41	QIQLVQSGPELKKPGETVKISCKASGYTFTTYGMGWVKQAPGKGLKWMGWI NTYSGVPTYADDFKGRFAFSLETSTSTAYLQINNLIKNEDMATYFCATPYEYDG AYWGQGTLLTVSA	448
V _H -42	QVQLQQSGPELVKPGDSVKISCKAAGYTFSDYYINWVKQRPGQGLEWIGWIY PVSNTKYNEKFKGKATLTVDTSSTAYMQLSSLTSEDSGVYFCAYLDYWGQ GTLTVSA	449
V _H -43	QVQLKQSGPGLVQPSQSLSTCTVSGFSLTSYGVHVRQAPGKGLEWLGVIS GGSTDYNAAFMSRLSISKDNSKSKVFFKMNSLQADDTAIYYCAKSPDGYDVA WFGYWGQGTLLTVSA	450

FIG. 24 cont.

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Name	Sequence	SEQ ID NO:
V _H -44	EVKLEESGGGLVQPGGSMKLSCVASGFTFSNYWMNWVRQSPEKGLEWVAEL RLKSNNYATHYAESVKGRFTISRDDSKSSVYLQMNNLRAEDTGIYYCTRH YGF PYWYFDVWGAGTTVTVSS	756
V _H -45	EVQLQQSGPELVKPGASVKMSCKASGYTFTSYVMHWVKQKPGQGLEWIGYI NPYNDGTTYNEKFKGKATLTSDKSSSTAYMELSSLTSEDSAVYYCARLLFY AMDYWGQGTSTVTVSS	757
V _H -46	QVQLQQSGPELVKPGALVKISCKASGYTFTSYDINWVKQRPQGLEWIGWIYP GDGSTKYNEKFKGKATLTADKSSSTVYMLSSLTSENSAVYFCAREAAASNA DYWGQGTSTVTVSS	758
V _H -47	QVQLQQSGPELVKPGALVKISCKASGYTFTSYDINWVKQRPQGLEWIGWIYP GDGSTKYNEKFKGKAALTADKSSSTAYMQLSSLTSENSAVYFCAREAAASNA DYWGQGTSTVTVSS	759
V _H -48	EVQLQQSGPELVKPGASVKMSCKASGYSFTNYIMHWVKQKPGQGLEWIGYIN PYNDGTTYNEKFKGKATLTSDKSSSTAYMELSSLTSEDSAVYYCARLLFYA MDYWGQGTSTVTVSS	760
V _H -49	QVQLQQSGAELVKPGASVKLSCKASGYTFRSYDINWVRQRPEQGLEWIGWIFP GEGISKYNEKFKGKATLTDDKLSSTAYMQLSSLTSEDSAVYFCAREATAGAM DYWGQGTSTVTVSS	761
V _H -50	EVKLEESGGGLVQPGGSMKLSCVASGFTFSNFWMNWVRQSPEKGLEWVAEIR LKSNNYATHYAESVKGRFTISRDDSKSSVYLQMNNLRAEDTGIYYCTRH YGF YWYFDVWGAGTTVTVSS	762
V _H -51	QIQLQQSGAELVKPGASVKLSCKASGYTFTSYDICWVRQRPEQGLEWIGWIFP GDGTTKYTENFKGKATLTDDKSSSTAYMHLSSLTSEDSAVYFCAREGAGSWF AYWGQGTSTVTVSS	763
V _H -52	EVQLQQSGAELVKPGASVKVSKASEYAFNNYMMWVKQRPQGLEWIGVI NPGSGATNYNENFKDKATLTADKSSSTAYMQLSSLTSDDSAVYFCTYNDLGY WGQGTSTVTVSS	764
V _H -53	EVKLQQSGPELMKPGTSMKISCKASGYSFTGYTMNWVKQSHGKNLEWIGLIN PYNGGTNYNQKFRGKATLSVDKSSNTAYMELSSLTSEDSAVYYCARKDDYY GSSPYALDYWGQGTSTVTVSS	765
V _H -54	QVQLQQSGAELMKPGASVKISCKATGYTFTNYWIEWVKQRPGHGLEWIGEFL PGDGSSHYNEKFKGKATFTSDTSSNTAYIHLSLTSEDSAVYYCVRDDYDSY WAQGTTLTVSS	766
V _H -55	QIVLSQSPAILSASPGEKVTMTCRASSSVTYMYWYQQKPGSSPQPWIYATSNL ASGVPARFSGSGSGTSYSLTISRVEAEDAATYYCQQWSSNPLTFGAGTKLELK	767
V _H -56	EVQLQQSGAEVVKPGAPVKLSCKASGYTFNNYWLNVKQRPGRGLEWIGRI DPSDSETHYNQKFKDKATLTVDMSSTAYIQLSSLTSEDSAVYYCARGDYYYG TRGPM DYWGQGTSTVTVSS	768
V _H -57	QVQLQQSGAELVRPGASVNLSCASGYTFTNYWMNWVKQRPQGLEWVGM IDPSDSETHYNQMFKDKATLTIDKSSSIAYMQLSSLTSEDSAVYYCARWGAMD YWGQGTSTVTVSS	769

FIG. 24 cont.

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Name	Sequence	SEQ ID NO:
V _H -58	QVQLKQSGPGLVAPSQSL SITCTVSGFSLTSYGVHWVRQPPGKGLEWLGIIWA GGSTNYPALMSRLSISKDKSKSQVFLKMNSLKTDDTAMYYCARDRASLLRP GAMDYWGQGTSTVTVSS	770
V _H -59	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWVKQAPGKGLKWMGW NTNTGEPTYAEFEKGRFAFSLETSASTAYLQINYLKNE DTATFFCARLDYDYD EDYWGQGTTLTVSS	771
V _H -60	QVQLVETGPGLVAPSQSL SITCTVSGFSLTSYGVHWIRQSPGKGLEWLGIIWA GGSTDYNSPLMSRLSISKDNSKNQVFLKMNSLQIDDTAIYYCASPPSGYDYDV FASWGQGTTLTVSA	772
V _H -61	QVQLKQSGPGLVQPSQSL SITCTVSGFSLINYG VHWVRQSPGKGLEWLGVIWA GGSTDYNAAFISRLSISKDNSKSKQVFFKMNSLQADDTAIYYCARIYYGRGYA MDYWGQGTSTVTVSS	773
V _H -62	QVQLKESGPGLVAPSQSL SITCTVSGFSLTSYGVHWIRQPPGKGLEWLGIIWA GGSTDYNSPLMSRLSITKDNSKSKQVFLKMNSLQSDDTAMYYCASPPSGYDYD VFAYWGQGTTLTVSA	774
V _H -63	QVQLKESGPVLVAPSQSL SITCTVSGFSLSSYGVHWVRQPPGKGLEWLGVIWA GGSTDYDSALMSRLSISKDNSKSKQVFLKMDSLQTD TAMYYCAKPPYDYDGA WFAYWGQGTTLTVSA	775
V _H -64	QVQLQQSGPQLVRPGASVKISCKASGYSTNYWMHWVKQRPGQGLEWIGMI DPSDSETRLNPKFKDKATLTVDKSSSTAYMQLSSPTSEDSAVYYCATGRPDY WGQGTTLTVSS	776
V _H -65	QVQLQQSGPQLVRPGASVKISCKASGYSTSYWMHWVKQRPGQGLEWIGMID PSDSETRLNPKFKDKATLTVDKSSSTAYMQLSSPTSEDSIVYYCAKGRPDYWG QGTTTLTVSS	777
V _H -66	DGKLQESGPGLVKPSQSLSLTCSVTGYSITSGYYWNWIRQFPGNKLEWMGHIS YDGRNNYNPSLKNRISITRDTSKNQFFLKLNSVTTEDTATYYCAGYDFLWYFD VWGTGTTTVTVSS	778
V _H -67	QVQLKESGPGLQPSQSLSLTCSFSGFSLSTFGMGVGVIRQPSGKGLEWLAHIW WDDDKHYNPALKSRLTISKDTSKNQVFLRIANVD TADNATYYCARIDYGDYV GFAYWGQGTTLTVSA	779
V _H -68	DGKLQESGPGLVKPSQSLSLTCSVTGYSITSGYYWNWIRQFPGNKLEWMGHIS YDGRNNYNPSLKNRISITRDTSKNQFFLKLNSVTTEDTATYYCAGYDFLWYFD VWGTGTTTVTVSS	780
V _H -69	EVQLQQSGAELVKSGASVKLSCTASGFNIKDYIMHWVKQRTEQGLEWIGRIY PEDDET KYAPKFQ GKATITADTSSNTAYLQLSSLTSEDTAVYYCARS GGYYV WFAYWGQGTTLTVSA	781
V _H -70	EVQLQQSGPELVKPGSSVKISCKASRYTFTDYNMDWVKQSHGKRLEWIGYIYP NNGGTGYNQKFKGKATLTVDKSSSTAYMELRSLTSEDSAVYYCARSYYDGSY DAMDYWGQGTSTVTVSS	782
V _H -71	QIQLVQSGPELKKPGETVKISCKASGYTFTIFGMNWVKQAPGKGLKWMGWV NTYTGEPTYADDFKGRFAFSLETSASTAYLQINN LKNE DTATYFCARGWFAY WGQGTTLTVSA	783

FIG. 24 cont.

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Name	Sequence	SEQ ID NO:
V _L -1	DIVLTQSPLSLPVTGPASISCRSSKSLLYKDGKTYLWFLQKPGQSPQLLIYL MSTHASGVDPDRFSGSGSGTDFTLKISRVEAEDVGVYYCQQLVDYPLTFGGGTK LEIK	161
V _L -2	DIVMTQTPLSLSVTPGQPASISCKSSKSLHSDGITYLYWYLQKPGQSPQLLIYR MSNLAGVDPDRFSGSGSGTDFTLKISRVEAEDVGVYYCAQMIEFPLTFGQGTK LEIK	162
V _L -3	DILMTQSPSSMSVSLGDTVSTITCHASQGINSNMGWLQKPGKSFGLIYHATN LEDGVPSRFSGSGSGADYSLTISSLESEDFADYYCVQYAQFPPTFGSGTKLEIK	163
V _L -4	DVVMQTPLTLSVAIGQPASISCKSSQSLFYDSDGKTYLWLLQRPQGSPKRLIY LLSKLDSGVPDRFSASGSGTDFTLKISRVEAEDLGVYYCLQSTHFPLTFGAGTK LEMK	164
V _L -5	DVVMQTPLTLSVTIGQPASISCKSSQSLFSDGKTYLWLLQRPQGSPKRLIY LVSKLDSGVPDRFTGSGSGTDFTLKISRVEAEDLGVYYCWQGFHPLTFGAGT KLEMK	165
V _L -6	DVLMTQTPLSLPVS LGDQASISCRSSQSIVHNNGNTYLEWYLQKPGQSPKLLIY KVS NRFS GVPDRFSGSGSGTDFTLKISRVEAEDLGVYYCFQGSHVPLTFGGGT KLELK	166
V _L -7	DIQMTQTSSLSASLGDRVTISCSASQGINNYLNWYQQKPDGTVKLLIYYASSL HSGVPSRFSGSGSGTDYSLTISNLEPEDIATYYCQYSQVPYTFGSGTKLEIK	167
V _L -8	DIQMNQSPSSLSASLGDTITITCRASQNIYIWLWSYQQKPGNIPKLLIYKASNLH TGVPSRFSGSGSGTDFTLTISTLQPEDATYFCLQGQSYPLTFGAGTKLEMK	168
V _L -9	DIQMTQTSSLSASLGDRVTINCSASQDISNYLNWYQQKPDGTVKLLIYYTSSL LSGVPSRFSGSGSGTDYSLTISNLEPEDIATYFCQQYSKLPYTFGSGTHLEIK	169
V _L -10	DIVMTQAAFSNPVTLGTSAISCRSSKSLHSDGITYLYWYLQRPQGQSPQLLIYR MSNLAGVDPDRFSGSGSGTDFTLRISRVEAEDVGVYYCAQMIEFPLTFGAGTIL ELK	170
V _L -11	DVVMQTPLTLSVAIGQPASISCKSSQSLFYDSDGKTYLWLLQRPQGSPKRLIY LVSKLDSGVPDRFSGSGSGTDFTLKISRVEAEDLGVYYCLQSTHFPLTFGAGTK LELK	171
V _L -12	DVLMTQTPLSLPVS LGDQASISCRSSQSIVHSNNGNTYLEWYLQKPGQSPKLLIY KVS NRFS GVPDRFSGSGSGTDFTLKISRVEAEDLGVYYCFQGSHVPLTFGAGT KLELK	172
V _L -13	NIWLTQSPSSLA VSAGEMVTMTCKSSQSVLYSSNQKNYLAWYQQKPGQSPKL LIYWASTRESGVPDRFTGSGSGTDFSLTISSVQAEDLAVYYCHQYLSSLTFGAG TKLELK	173
V _L -14	NIMMTQSPSSLA VSAGEKVTMSCKSSQSVLYSSNQKNYLAWYQQKPGQSPKL LIYWASTRESGVPDRFTGSGSGTDFSLTISSVQPEDLAVYYCHQYLSSLTFGAG TKLELK	174
V _L -15	NIMMTQSPSSLA VSAGQKVTMSCKSSQSVLYSSSQKNYLAWYQQKPGQSPKL LIYWASTRESGVPDRFSGSGSGTDFTLTISVQPEDLAVYYCHQYLSSLTFGAG TKLELK	175

FIG. 25

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Name	Sequence	SEQ ID NO:
V_L-16	DVVMQTPLSLPVS LGDQASISCRSSQSLVHNSGNTYLHWYLQRPQGSPNLLI YKVS NRFS GVPDRFSGSGSGTDFTLKISRVA AEDLG VYFCSQSTHVPPTFGGGT KLEIK	176
V_L-17	QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGI NNRVPGV PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKL TVL	177
V_L-18	DIVMTQAAFSNPVTLGTSAISCRSSKSLHTNGITFLYWYLQKPGQSPQPLIYQ MSNLASGV PDRFSSSGSGTDFTLRISRVEAEDVGVYYCAQNLELPWTFGGGK LEIN	178
V_L-19	NIMMTQSPSSLAVSAGEKVTMSCKSSQSVLYSSNQKNYLAWYQQKPGQSPKL LIYWASTRESGV PDRFTGSGSGTDFTLTISSVQAEDLAVYYCHQYLSLTFGAG TKLELK	179
V_L-20	DIVMTQSPSSLAMSVGQKVTMSCKSSQSLNSSNQKNYLAWYQQKPGQSPKL LVYFASTRESGV PDRFIGSGSGTDFTLTISSVQAEDLADYFCQQHYSTPYTFGG GAKLEIK	180
V_L-21	DIRMTQSPSSLSASLGDTITITCHASQNINWLSWYQQKPGNIPKLLIYKASNLH TGVPSRFSGSGSGTGFTLTISLQPEDATYYCQQGQSYPTFGGGTKLELK	181
V_L-22	EIVLTQSPASLSVTTGEKVTIRCITSIDIDDDMNWYQQKPGEPKLLISEGNTLRP GVPSRFSSSGYGTDFVFTIENTLSEDVADYYCLQSDNKPLTFGAGTKLELK	182
V_L-23	DIQVIQSPSSLSASLGDTITITCHASQNINWLSWYQQKPGNIPKLLIYKASNLH TGVPSRFSGSGSGTGFTLTISLQPEDATYYCQQGQSYPTFGGGTKLELK	183
V_L-24	EIKMNQSPSSLSASLGDTITITCHASQNINWLSWYQQKPGNIPKLLIYKASNLH TGVPSRFSGSGSGTGFTLTISLQPEDATYYCQQGQSYPTFGGGTKLELK	184
V_L-25	QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGT NNRAPGV PARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHLVFGGGTKL TVL	185
V_L-26	DVLMQTPLSLPVS LGDQASISCRSSQDIVHSSGNTYLEWYLQKPGQSLKLLIY KVS NRFS GVPDRFSASGSGTDFTLKISRVEAEDLG VYFCQGSHPPTFGSGTK LEIK	186
V_L-27	DIGMRQAAFSNPVTLGTSAISCRSSKSLLYSNGITYLYWFLQKPGQSPQLLIYQ MSNLASGV PDRFSSSGSGTDFTLRISRVEADVGVYYCAQNLELPWTFGGGK LEIK	187
V_L-28	DIVLTQSPASLGVS LGQRATISCRASKSVSTSGYSYMHWYQQKPGQPPKLLIYL ASILESGV PARFSGSGSGTDFTLNIHPVEEEDAAIYYCQHSRELPLTFGAGTKLE LK	258
V_L-29	NIVLTQSPASLAVSLGQRATISCRASESVDSYGNSFMHWYQQKPGQPPKLLIYL ASNLESGV PARFSGSGSRTDFTLTIDPVEADDAATYYCQQNNEDPWTFGGGK LEIK	259

FIG. 25 cont.

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Name	Sequence	SEQ ID NO:
V _L -30	DVVMTQTPLTLSVTIGQPASISCKSSQSLLYSNGKTYLNWLLQRPQGSPKRLIY LVSKLDSGVPDRFTGSGSGTDFTLKISRVEAEDLGVYYCVQGTHFPQTFGGGT KLEIK	451
V _L -31	DIVITQDELSNPVTSGESVSISCRSSKSLLYKDGKTYLNWFLQRPQGSPQLLIYL MSTHASGVSDRFSGSGSGTDFTLEISRVEAEDGVYYCQQLVDYPLTFGAGTK LELK	452
V _L -32	DIVMTQAAFSNPVTLGTSASISCRSSKSLLHSDGITYLYWYLQRPQGSPQLLIYR MSNLASGVDPDRFSGSGSGTDFTLRISRVEAEDGVYYCAQMLEFPLTFGAGTK LELK	453
V _L -33	DIVMTQSPLSLPVTGPGEASISCRSSKSLLHSDGITYLYWYLQKPGQSPQLLIYR MSNLASGVDPDRFSGSGSGTDFTLKISRVEAEDGVYYCAQMLEFPLTFGQGTK LEIK	454
V _L -34	DVVMTQTPLTLSVTIGQPASISCKSSQSLLYTDGKTYLSWFLQRPQGSPKRLIY LVSKLDSGVPDRFSGSGSGTDFTLKISRVEAEDLGVYYCLQSTHFPLTFGAGTK LEVKR	455
V _L -35	SIVMTQTPKFLLVSAGDRVTITCKASQSVSNDVAWYQQKPGQSPKLLIYYASN RYTGVDPDRFTGSGYGTDFTFITISTVQAEDLAVYFCQQDYTSPYTFGGGTKLEIK R	456
V _L -36	DIQMTQTTSSLSASLGDRVTISCSASQGISNYLNWYQQKPDGTVKLLIYYTSSL HSGVPSRFSGSGSGTDYSLTISNLEPEDIATYYCQYSELPYTFGSGTKLEIKR	457
V _L -37	DIVMTQSHKFMSTSVGDRVSITCKASQDVSTAVAWYQQKPGQSPKLLIYWAS TRHTGVPDRFTGSGSGTDYTLTISSVQAEDLALYYCQHYTTPLTFGAGTKLE LKR	458
V _L -38	DIVMTQSQKFMSTSVGERVSITCKASQNVGTNVAWYQQKAGQSLELLIYGAS NRHTGVPDRFTGSGSGTDFTLTITNVQSEDMTNYFCEQYSNFPLTFGAGTKLEL KR	459
V _L -39	DVVMTQTPLTLSVTIGQPASISCKSSQSLFHSDGKTYLNWLLQRPQGSPKRLIY LVSKLDSGVPDRFTGSGSGTDFTPKISRVEDEDLGVYYCWQGTHFPLTFGAGT KLEMKR	460
V _L -40	DIQMNQSPSSLSASLGDTISITCRASQNINIWLWYQQKPGNIPQLLIYKASNLH TGVPSRFSGSGSGTDFTLTISLQPEDATYYCLQGQSYPLTFGAGTKLVMKR	461
V _L -41	DVVMTQTPLTLSVTIGQPASISCKSSQSLLHSDGKTYLNWLLQRPQGPPKRLM YLVSTLDSGVPDRFTGSGSGTDFTLKISRVEAEDLGVYYCWQGTHFPLTFGAG TKPER	462
V _L -42	DIVMTQAAFSNPVTLGTSASISCRSSKSLLHSDGITYFYWYLQRPQGSPQLLIYR MSNLASGVDPDRFSGSGSGTDFTLRISRVEAEDGVYYCAQMLEFPLTFGAGTK LER	463
V _L -43	DIVMTQSHKFMSTSVGDRVSITCKASQDVRTAVAWYQQKPGQSPKLLIYWAS TRHTGVPDRFTGSGSGTDFTLTLSNVQSEDLADYFCQQYSSYPWTFGGGTKLE IKR	464

FIG. 25 cont.

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Name	Sequence	SEQ ID NO:
V_L-44	NIVLTQSPASLAVSLGQRATISCRASESVDSYGNSFMHWYQQKPGQPPKLLIYL ASNLESGVPARFSGSGSRTDFTLTIDPVEADDAATYYCQQNNEDPWTFGGGTK LEIK	784
V_L-45	DILMTQSPSSMSVSLGDTVSIITCHASQGINSNIGWLQQKPGKSFKGLIYHGNTL EDGVPSRFSGSGSGADYSLTISSLESEDFADYYCVQYDQFPWTFGGGTKLEIK	785
V_L-46	DIVMSQSPASLGVSLGQRATISCRASKSVSTSGYSYMHWYQQKPGQPPKLLIY LASILESGVPARFSGSGSGTDFTLNIHPVEEEDAATYYCQHSRELPLTFGAGTKL ELK	786
V_L-47	DIVLTQSPASLAVSLGQRATISCRASKSVSTSGYSYMHWYQQKPGQPPKLLIYL ASILESGVPARFSGSGSGTDFTLNIHPVEEEDAATYYCQHSRELPLTFGAGTKLE LK	787
V_L-48	DILMTQTPSSMSVSLGDTVSIITCHASQGISSNIGWLQQKPRKSFKGLIYYGTNLE DGVPSRFSGSGSGADYSLTISSLESEDFADYYCVQYDQFPWTFGGGTKLEIK	788
V_L-49	DIVLTQSPASLAVSLGQRATISCRASKSVSTSGYSCMHWYQQKPGQPPKLLIYL ASNLESGVPARFSGSGSGTDFTLSIHPVEEEDAATYYCHHSTELPYTFGGGTKL EVE	789
V_L-50	DIVLTQSPASLAVSLGQRATISCRASESVDSYGNSFMHWYQQKPGQPPKLLIYL ASNLESGVPARFSGSGSRTDFTLTIDPVEADDAATYYCQQNNEDPWTFGGGTK LEIK	790
V_L-51	DIVLTQSPASLAVSLGQRATISCRASKSVSTSGYSYMHWYQQKPGQPPKLLIYL ASILESGVPARFSGSGSGTDFTLNIHPVEEEDAATYYCQHSRELPLTFGAGTKLE LK	791
V_L-52	DVVMTQTPLTSLVTIGQPASICKSSQSLLYS DGKTYLNWLLQRPQSPKRLIY LVSQLD SGVPDRFTGSGSGTDFTLKISRVEADDLGVYCCVQGTHLPTFGGGTK LEIK	792
V_L-53	DIVMTQSPASLAVSLGQRATISCRASESVENHVN SFMHWYQQKPGQPPKLLIY RASNLQSGIPARFSGSGSRTDFTLTINPVEADDAATYYCQQNNEVPYTFGGGT KLEIK	793
V_L-54	QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDLFTGLIGGT NNRAPGVPARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHLVFGGGTKL TVL	794
V_L-55	SQSPAILSASPGEKVTMTCRASSSVTYMYWYQQKPGSSPQWYIYATSNLASGV PARFSGSGSGTSYSLTISRVEAEDAATYYCQQWSSNPLTFGAARIYYGRGYA MDYVFIFPPSDEQL	795
V_L-56	DIVLTQSPASLAVSLGQRATISCRASESLDNGISFMNWFQQRPGQPPKLLIYAA SNLESGVPARFSGSGSGTDFTSLNIHPMEEDDAAMYFCQHSKEVPWTFGGGTKL EIK	796
V_L-57	DIVMTQSHKIMSTSVGDRVSITCKASQDVSTTVAWFQQKPGQSPKLLLYWAST RHTGVDRFTGSGSGTDYTLTISSVQAEDLALYYCQQHYSPPTFGSGTKLEIK	797

FIG. 25 cont.

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Name	Sequence	SEQ ID NO:
V _L -58	DIVMTQSQKFMSTSVGDRVSVTCKASQNVGINVAWYQQKPGQSPKALIYSAS YRYSQVPDRFTGSGSGTDFTLTISNVQSEDLAEYFCQQYNSYPYTFGGGT KLEMK	798
V _L -59	DVVMQTQPLTLSVTLGQPASISCRSSQSLLDSDGKTYLNWLLQRPQGSPKRLIY LVSRLDSGVPDRFTGSGSGTDFTLKISRVEAEDLGVYYCWQGTHTFPFTFGGGT KLEIK	799
V _L -60	DIRMTQSPASLSASVGETVTITCRASGNIHNYLAWYHQKQGKSPQLLVYNVKT LADGVPSRFSGSGSGTQFSLKINSLQPEDFGTYQCQHFWSIFPTFGGGTKLEIK	800
V _L -61	QILLSQSPAILSASPGKVTMTCRASSSVTYMYWYQQKPGSSPQPWIYATSNLA SGVPARFSGSGSGTSYSLTISRVEAEDAATYYCQQWSSNPLTFGAGTKLELK	801
V _L -62	DILMTQSPASLSASVGETVTITCRASGNIHNYLAWYQQKQGKSPQLLVYSAKT LADGVPSRFSGSGSGTQFSLKIDSLQPEDFGTYQCQHFWSLFTFGGGTKLEIK	802
V _L -63	DVVMQTQPKFLLVSAGDRVITITCKASQSVSSDAWYQQKPGQSPKLLIYFASN RYTGVDPDRFTGSGYGTDFTTISTVQAEDLAVYFCQHNYISPFTFGGGTKLEIK	803
V _L -64	DIVMTQSHKFMSTSVGDRVSITCKASQDVSTAVAWYQQKPGQSPKLLIYWAS TRHTGVPDRFTGSGSGTDYTLTISSVQAEDLALYYCQQHYSTPYTFGGGT KLEIK	804
V _L -65	DIAMTQSHKFMSTSVGDRVSITCKASQDVSTAVAWYQQKPGQSPKLLIYWAS TRHTGVPDRFTGSGSGTDYTLTISSVQAEDLALYYCQQHYNTPTPYTFGGGT KLEIK	805
V _L -66	DVGMTQTPLILSVTIGQPASISCKSSQSLLYINGKTYLNWLLQRPQGSPKRLIYL VSKLDSGVPNRFSGSGSGTDFTLKISRVEAEDLGVYYCLQSTHFPQTFGGGTKL EIK	806
V _L -67	DILLTQSPSSMSVSLGDTVSIATCHASQGINSNIGWLQQKPGKSFGLIYHGTNLE DGVPSRFSGSGSGADYSLTISSLESEDFADYYCVQYDQFPWTFGGGT KLEIK	807
V _L -68	DVGMTQTPLILSVTIGQPASISCKSSQSLLYINGKTYLNWLLQRPQGSPKRLIYL VSKLDSGVPNRFSGSGSGTDFTLKISRVEAEDLGVYYCLQSTHFPQTFGGGTKL EIK	808
V _L -69	DIVMTQAAPSPVPTPGESVSISCRSSRSLLHSNGYTYLYWFLQRPQGSPRLIYR MSNLAGVPDRFSGSGSGTAFTLRISRVEAEDGVYYCMQHLEYPTPYTFGGGT KLEIK	809
V _L -70	DIQMTQTSSLSASLGDRVITISCSASQGISNYLNWYQQKPDGTVKLLIYYTSSL HSGVPSRFSGSGSGTDYSLTISNLEPEDIATYYCQQYSKLPRTFGGGTKLEIN	810
V _L -71	DVVMQTQPLTLSVTIGQPASISCKSSRSLLDSDGKTYLNWLLQRPQGSPKRLIY LVSKLDSGVPDRFTGSGSGTDFTLKISRVEAEDLGVYYCWQGTHTFPQTFGGGT KLEIN	811

FIG. 25 cont.

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Name	Sequence	SEQ ID NO:
HC-1	MGSTAILGLLLAVLQGVCAQVQLVQSGSELKKPGASVKVSCKASGYTFTNYGMNWV RQAPGQGLKWMGWINTNTGEPTYVEEFTGRFVFSLETSVSTAYLQISSLKAEDTAVYF CAPYDNFFAYWGQGTITVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVT VSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGKTKYTCNVDHKPSNTKVDK RVESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSQEDPEVQFN WYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIE KTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNY KTTTPVLDSGDSFFLYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLSLG	188
HC-2	MDPKGSLSWRILLFSLAFELSYGQVQLVQSGAEVKKPGASVKVSCKASGYSTNYM HWVRQAPGQRLEWMGWIPGSGNTNYNEKFQGRVTITADTSASTAYMELSSLRSED AVYYCSTAPGGFDVWGQGTITVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYF PEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGKTKYTCNVDHKPSNT KVDKRVESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSQEDPE VQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGL PSSIEKTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPE NNYKTTTPVLDSGDSFFLYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLSLG	189
HC-3	MDPKGSLSWRILLFSLAFELSYGQVQLKQSGAELVRPGASVKLSCKASGYTFTDYYIN WVKQRPQGQLEWIARIYPGTGNTDYNKFKGRATLTAEKSSSTAYMQLSSLTSEDSAV YFCARFAYYGGGGYFDYWGHTTLTVSSAKTTPPSVYPLAPVCGDITGSSVTLGCLV KGYFPEPVTLTWNSGSLSSGVHTFPAVLQSDLYTLSSSVTVTSSTWPSQSITCNVAHPAS STKVDKKIEPRGPTIKCPPCKCPAPNAAGGPSVFIFPPKIKDVLMLSLPIVTCVVDVDS EDDPDVQISWVFNVEVHTAQTQTHREDYNSTLRVVSALPIQHQQDWMSGKEFKCKVN NKDLGAPIERTISKPKGSVRAPQVYVLPPEEEMTKKQVTLTCMVTDFMPEDIYVEWT NNGKTELNYKNTPEVLDSGDSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNHHTT KSFSRTPGK	190
HC-4	MDPKGSLSWRILLFSLAFELSYGQIQLVQSGPELKKPGETVKISCKTSGYKFKTYVMS WVKQAPGKALKWMGWINTYSGVPTYADDFKGRFAFSLETSASTAYLEIINLKNE TATYFCARDGNYGDPMDYWGQTSVTVSSAKTTPPSVYPLAPVCGDITGSSVTLGCLVK GYFPEPVTLTWNSGSLSSGVHTFPAVLQSDLYTLSSSVTVTSSTWPSQSITCNVAHPAS TKVDKKIEPRGPTIKCPPCKCPAPNAAGGPSVFIFPPKIKDVLMLSLPIVTCVVDVSE DDPDVQISWVFNVEVHTAQTQTHREDYNSTLRVVSALPIQHQQDWMSGKEFKCKVNN KDLGAPIERTISKPKGSVRAPQVYVLPPEEEMTKKQVTLTCMVTDFMPEDIYVEWTN NGKTELNYKNTPEVLDSGDSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNHHTTKS FSRTPGK	191
HC-5	MDPKGSLSWRILLFSLAFELSYGQIQLVQSGPELKKPGETVKISCKASGYTFTTYGMG WVKQAPGKDLKWMGWINTYSGVPTYADDFKGRFAFSLETSASTAYLQISNLKNE TATYFCSTPYEYDGA YWGQGLTVVSAKTTPPSVYPLAPVCGDITGSSVTLGCLVKGYF PEPVTLTWNSGSLSSGVHTFPAVLQSDLYTLSSSVTVTSSTWPSQSITCNVAHPASSTKV DKKIEPRGPTIKCPPCKCPAPNAAGGPSVFIFPPKIKDVLMLSLPIVTCVVDVSEDDP DVQISWVFNVEVHTAQTQTHREDYNSTLRVVSALPIQHQQDWMSGKEFKCKVNNKD LGAPIERTISKPKGSVRAPQVYVLPPEEEMTKKQVTLTCMVTDFMPEDIYVEWTNNG KTELNYKNTPEVLDSGDSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNHHTTKSFS RTPGK	192
HC-6	MDPKGSLSWRILLFSLAFELSYGEVQLVESGGGLVKPGGSLKLSAASGFAFSSYAMS WVRQTPEKRLEWVATISDGGVYTYTTHVKGRTISRDAEDNLYLQMSHLKSEDTA MYVCVRDGGYWGQGTTLTVSSAKTTPPSVYPLAPVCGDITGSSVTLGCLVKGYFPEP VTLTWNSGSLSSGVHTFPAVLQSDLYTLSSSVTVTSSTWPSQSITCNVAHPASSTKVDK KIEPRGPTIKCPPCKCPAPNAAGGPSVFIFPPKIKDVLMLSLPIVTCVVDVSEDDPDV QISWVFNVEVHTAQTQTHREDYNSTLRVVSALPIQHQQDWMSGKEFKCKVNNKDLG APIERTISKPKGSVRAPQVYVLPPEEEMTKKQVTLTCMVTDFMPEDIYVEWTNNGKT ELNYKNTPEVLDSGDSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNHHTTKSFSRT PGK	193

FIG. 26

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Name	Sequence	SEQ ID NO:
HC-7	MDPKGSLSWRILLFSLAFELSYGQIQLVQSGPELKKPGETVKISCKASGYTFTTYAMS WVKQAPGKGLKWMGWINTYSGVPTYADDLKGRFAFSLETSASTAYLQINNKNEDTA TYFCARGPYAMDYWGQGTSTVSSAKTTPPSVYPLAPVCGDITGSSVTLGCLVKGYFP EPVTLTWNLSGLSSGVHTFPAVLQSDLYTLSSSVTVTSSTWPSQSITCNVAHPASSTKVD KKIEPRGPTIKPCPPCKCPAPNAAGGPSVFIFPPKIKDVLMSLSPIVTCVVDVSEDDPD VQISWVFNNEVHTAQTQTHREDYNSTLRVVSALPIQHQQDWMSGKEFKCKVNNKDL GAPIERTISKPKGSVRAPQVYVLPPEEEMTKKQVTLTCMVTDFMPEDIYVEWTNNGK TELNYKNTEPVLSDSGSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNHHTTKSFSTR TPGK	194
HC-8	MDPKGSLSWRILLFSLAFELSYGEVQLQQSGPELVKPGASVKISCKASGYTFTDFYIN WVKQSHGKSLEWIGDINPKNGGINYNPKFKIKATLTVDKSSSTSYMDLRGLTSEDSAV YYCTSGYGFYWGQGTSTVSSAKTTPPSVYPLAPVCGDITGSSVTLGCLVKGYFPEP VTLTWNLSGLSSGVHTFPAVLQSDLYTLSSSVTVTSSTWPSQSITCNVAHPASSTKVDK KIEPRGPTIKPCPPCKCPAPNAAGGPSVFIFPPKIKDVLMSLSPIVTCVVDVSEDDPDV QISWVFNNEVHTAQTQTHREDYNSTLRVVSALPIQHQQDWMSGKEFKCKVNNKDLG APIERTISKPKGSVRAPQVYVLPPEEEMTKKQVTLTCMVTDFMPEDIYVEWTNNGK TELNYKNTEPVLSDSGSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNHHTTKSFSTR PGK	195
HC-9	MDPKGSLSWRILLFSLAFELSYGQIQLVQSGPELKKPGESVKISCKASGYAFTTYGMS WVQQAPGKGLKWMGWINTYSGVPTCADDKGRFAFSLETSASTAYLQINNLRNEDT ATYFCARGPYAMDYWGQGTSTVSSAKTTPPSVYPLAPVCGDITGSSVTLGCLVKGY FPEPVTLTWNLSGLSSGVHTFPAVLQSDLYTLSSSVTVTSSTWPSQSITCNVAHPASSTK VDKKIEPRGPTIKPCPPCKCPAPNAAGGPSVFIFPPKIKDVLMSLSPIVTCVVDVSEDD PDVQISWVFNNEVHTAQTQTHREDYNSTLRVVSALPIQHQQDWMSGKEFKCKVNNKD LGAPIERTISKPKGSVRAPQVYVLPPEEEMTKKQVTLTCMVTDFMPEDIYVEWTNNG KTELNYKNTEPVLSDSGSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNHHTTKSFSTR TPGK	196
HC-10	MDPKGSLSWRILLFSLAFELSYGQIQLVQSGPELKKPGETVKISCKASGYTFTTYAMS WVKQAPGKGLKWMGWINTYSGVPTYADDLKGRFAFSLETSASTAYLQINNKNEDTA TYFCARGPYAMDYWGQGTSTVSSAKTTPPSVYPLAPVCGDITGSSVTLGCLVKGYFP EPVTLTWNLSGLSSGVHTFPAVLQSDLYTLSSSVTVTSSTWPSQSITCNVAHPASSTKVD KKIEPRGPTIKPCPPCKCPAPNAAGGPSVFIFPPKIKDVLMSLSPIVTCVVDVSEDDPD VQISWVFNNEVHTAQTQTHREDYNSTLRVVSALPIQHQQDWMSGKEFKCKVNNKDL GAPIERTISKPKGSVRAPQVYVLPPEEEMTKKQVTLTCMVTDFMPEDIYVEWTNNGK TELNYKNTEPVLSDSGSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNHHTTKSFSTR TPGK	197
HC-11	MDPKGSLSWRILLFSLAFELSYGQVQLQQSGPELVKPGASVKISCKASGYTFTDYIN WVKQRPQGGLWIGWIYPGSNDTKYNEKFKGKATLTVDTSSSTAYMQLGSLTSEDSA VYFCANYFGCSGWFFDVWGTGTTVTVSSAKTTPPSVYPLAPVCGDITGSSVTLGCLVK GYFPEPVTLTWNLSGLSSGVHTFPAVLQSDLYTLSSSVTVTSSTWPSQSITCNVAHPASS TKVDKKIEPRGPTIKPCPPCKCPAPNAAGGPSVFIFPPKIKDVLMSLSPIVTCVVDVSE DDPDVQISWVFNNEVHTAQTQTHREDYNSTLRVVSALPIQHQQDWMSGKEFKCKVNN KDLGAPIERTISKPKGSVRAPQVYVLPPEEEMTKKQVTLTCMVTDFMPEDIYVEWTN NGKTELNYKNTEPVLSDSGSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNHHTTKS FSRTPGK	198
HC-12	MDPKGSLSWRILLFSLAFELSYGQIQLVQSGPELKKPGETVKISCKTSGYKFKTYVMS WVKQAPGKALKWMGWINTYSGVPTYADDFKGRFAFSLETSASTAYLEIINLNEDTA TYFCARDGNYGDPMDYWGQGTSTVSSAKTTPPSVYPLAPVCGDITGSSVTLGCLVK GYFPEPVTLTWNLSGLSSGVHTFPAVLQSDLYTLSSSVTVTSSTWPSQSITCNVAHPASS TKVDKKIEPRGPTIKPCPPCKCPAPNAAGGPSVFIFPPKIKDVLMSLSPIVTCVVDVSE DDPDVQISWVFNNEVHTAQTQTHREDYNSTLRVVSALPIQHQQDWMSGKEFKCKVNN KDLGAPIERTISKPKGSVRAPQVYVLPPEEEMTKKQVTLTCMVTDFMPEDIYVEWTN NGKTELNYKNTEPVLSDSGSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNHHTTKS FSRTPGK	199

FIG. 26 cont.

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Name	Sequence	SEQ ID NO:
HC-13	MDPKGSLSWRILLFLSLAFELSYGEVQLVESGGGLVKPGGSLKLSAASGFTFSSYAMS WVRQTPEKRLEWVATISDGGIYTYYPDNVKGRFTISRDNKNNLFLQMSHLKSEDTA MYCVRDGGYWGQGTTLTVSSAKTTPPSVYPLAPVCGDTTGSSVTLGCLVKGYFPEP VTLTWNSSGLSSGVHTFPAVLQSDLYTLSSSVTVTSSTWPSQSITCNVAHPASSTKVDK KIEPRGPTIKPCPPCKCPAPNAAGGPSVFIFPPKIKDVLMSLSPIVTCVVVDVSEDDPDV QISWVFNNEVHTAQTQTHREDYNSTLRVVSALPIQHQQDWMSGKEFKCKVNNKDLG APIERTISKPKGSVRAPQVYVLPPEEEMTKKQVTLTCMVTDMPEDIYVEWTNNGKT ELNYKNTPEVLDSGSGSYFMYSKLRVEKKNWVERNYSYSCSVVHEGLHNHHTTKSFSRT PGK	200
HC-14	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWVKQAPGKGLKWMGWINTYTG EPSYADDFKGRFAFSLETSASTAYLQINNLLKNEDEMATYFCARWGAGDYAMDFW GQGTSTVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSG VHTFPAVLQSSGLYSLSSVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPPCPP CPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSDQEDPEVQFNWYVDGVEVHN AKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPR EPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDG SFFLYSRLTVDKSRWQEGNVFSCSVMHEALHNHYTQKSLSLGL	201
HC-15	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWVKQAPGKGLKWMGWINTYTG EPSYADDFKGRFAFSLETSASTAYLQINNLLKNEDEMATYFCARWGAGDYAMDYW GQGTSTVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSG VHTFPAVLQSSGLYSLSSVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPPCPP CPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSDQEDPEVQFNWYVDGVEVHN AKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPR EPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDG SFFLYSRLTVDKSRWQEGNVFSCSVMHEALHNHYTQKSLSLGL	202
HC-16	QIQLVQSGPELKKPGETVKISCKASGYTFTNFGMNWVKQAPGKGLKWMGWINTYTGE PSYADDFKGRFAFSLETSASTAYLQINNLLKNEDEMATYFCARWGAGDYAMDYWGQ GTSVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVH TFPAVLQSSGLYSLSSVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPPCPPCP APEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSDQEDPEVQFNWYVDGVEVHN AKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREP QVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF LYSRLTVDKSRWQEGNVFSCSVMHEALHNHYTQKSLSLGL	203
HC-17	EVQLLESGLLVKPGGSLKLSAASGFTFSSYAMSWVRQTPEKRLEWVASISSGGDTY YPDSVKGRTISRDNARNILYLQMSLRSEDTAMYCYGNSLFDYWGQGTTLTVSS ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQS SGLYSLSSVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPPCPPCPAPEFLGGP SVFLFPPKPKDTLMISRTPEVTCVVVDVSDQEDPEVQFNWYVDGVEVHN AKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREP QVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTV DKSRWQEGNVFSCSVMHEALHNHYTQKSLSLGL	204
HC-18	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWVKQAPGKGLKWMGWINTYTG EPSYADDFKGRFAFSLETSASTAYLQINNLLKNEDEMATYFCARWGAGDYAMDYW GQGTSTVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSG VHTFPAVLQSSGLYSLSSVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPPCPP CPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSDQEDPEVQFNWYVDGVEVHN AKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPR EPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDG SFFLYSRLTVDKSRWQEGNVFSCSVMHEALHNHYTQKSLSLGL	205

FIG. 26 cont.

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Name	Sequence	SEQ ID NO:
HC-19	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWVKQAPGKGLKWMGWINTYTGEPTYAGDLKGRFAFSLETSASTAYLQINNLIKNEATATYFCVRYTMDYWGQGTSTVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGKTKYTCNVDPHKPSNTKVDKRVESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG	206
HC-20	QVTLKESGPGILQPSQTLSTCSFSGFSLSTSGMGVGVWIRQPSGKGLEWLAHIWWDKKYYNTALKSGLTISKDASKNQVFLKIASMDTADTATYYCARNLYDGSYGYAMDYWGQGTSTVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGKTKYTCNVDPHKPSNTKVDKRVESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG	207
HC-21	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWVKQAPGKGLKWMGWINTYTGEPAAYADDFKGRFAFSLETSASTAYLQINNLIKNEATATYFCARWGGYDGDYYAMDYWGQGTSTVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGKTKYTCNVDPHKPSNTKVDKRVESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG	208
HC-22	EVQLVESGGDLVKPGGSLKLSCAASGFTFSNYGLSWIRQTPDKRLEWVATISSGGSYTYYPDSVKGRFTISRDSAKNTLYLQMSSSLKSEDTAMYYCARHAHYGVSPPYFDYWGQGTCLTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGKTKYTCNVDPHKPSNTKVDKRVESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG	209
HC-23	QIQLVQSGPEVKKPGETVKISCKASGYIFTNYGMNWVKQAPGKGLKWMGWINTYTGEPTYTDDFKGRFAFSLETSASTAYLQINNLIKNEATATYFCAKFGNYVGAMDYWGQGTSTVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGKTKYTCNVDPHKPSNTKVDKRVESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG	210
HC-24	EVQLQQSGPELVKPGASVKISCKASGNTFTDHNMHVVKQSHGKSLEWIGYITPYNGGTGYNQKFKSKATLTVDNSSSTVYMELRSLTSEDSAVYYCARGEYDYLAWFAYWGQGTCLVTVSAASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGKTKYTCNVDPHKPSNTKVDKRVESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG	211

FIG. 26 cont.

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Name	Sequence	SEQ ID NO:
HC-25	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWVKQAPGKGLKWMGWINTYTGEPTYYVDDFKGRFAFSLETSASTAYLRINNLKNEDTATYFCAKFGNYVGAMDYWGQGT SVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTGTKYTCNVDHKPSNTKVDKRVESKYGPPCPPCPAPE FLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVY TLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGL	212
HC-26	QIQLVQSGPEVKKPGETVKISCKASGYIFTNYGMNWVKQAPGKGLKWMGWINTYTGEPTYTDDFKGRFAFSLETSASTAYLQINNLKNEDTATYFCAKFGNYVGAMDYWGQGT SVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTGTKYTCNVDHKPSNTKVDKRVESKYGPPCPPCPAPE FLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVY TLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGL	213
HC-27	EVQLVETGGGLVKPGGSLKLSCAASGFTFSSYAMSWVRQTPEKRLEWVASISSGGSTYYPDSVKGRFTISRDNARNILYLQMSSLRSEDTAMYCYCTRFTTVVEMDYWGQGT SVTVSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTGTKYTCNVDHKPSNTKVDKRVESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGL	214
HC-28	QVQLQQTGAELVKPGASVKLSCKASGYTFTSYWINWVKQRPQGQLEWIGNIYPGSSSIYYSEKFKSKATLTVDTSSTAYMQLSSLTSDDSAVYYCARWGYWGQGTTLTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTGTKYTCNVDHKPSNTKVDKRVESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGL	215
HC-29	QVTLKESGPGILQPSQTLSTLCSFSGFSLSTFGMGVGVWIRQPSGKGLEWLAHIWDDDKHYNPALKSRLTISKDTSKNQVFLRIANVDADNATYYCARIDYGDYVGFAIYWGQGT LVTVSAASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTGTKYTCNVDHKPSNTKVDKRVESKYGPPCPPCPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGL	216

FIG. 26 cont.

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Name	Sequence	SEQ ID NO:
HC-30	QVQLQQSGPELVRPGALVKISCKASGYTFTSYDINWVKQRPQGQLEWIGWIYPGDGST KYNEKFKGKATLTADKSSSTAYMQLSSLTSENSAVYFCAREAASNAMDYWGQGTSTV VSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAV LQSSGLYSLSSVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPEFL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSDQEDPEVQFNWYVDGVEVHNAKTKPRE EQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTL PPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRL TVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG**	465
HC-31	EVKLEESGGGLVQPGGSMKLSCLVASFSTFSNYWMNWRQSPKGLWVAEIRLKSNN YATHYAESVKGRFTISRDDSKSSVYLQMNNLRAEDTGIYYCTRHYGFPYWFYFDVWGA GTTVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVH TFPAVLQSSGLYSLSSVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPCCPPCP APEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSDQEDPEVQFNWYVDGVEVHNAK TKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREP QVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF LYSRLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG**	466
HC-32	QIQLVQSGPELTKPGETVKISCKASGYTFTDYGMMNWRQAPGETLKWGMGWINTYTGE PTYADDFKGRFAFSLESSASTAYLQINNKNEDVATYFCARYPMDYWGQGTSTVTVSSA STKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSS GLYSLSSVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPEFLGGPS VFLFPPKPKDTLMISRTPEVTCVVVDVSDQEDPEVQFNWYVDGVEVHNAKTKPREEQFN STYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQE EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDK SRWQEGNVFSCSVMEALHNHYTQKSLSLGLG	467
HC-33	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWRQAPGKGLKWMGWINTNTG EPTYAEFFKGRFAFSLETSASTAYLQINNKNEDTATYFCATGGGNWDFDYWGQGTTL TVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPA VLQSSGLYSLSSVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPEF LGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSDQEDPEVQFNWYVDGVEVHNAKTKPR EEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYT LPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSR LTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG**	468
HC-34	QIQLVQSGPELKKPGETVKISCKASGYTFTNYGMNWRQAPGKGLKWMGWINTNTG EPTYVEEFKGRFAFSLETSASTAYLQINNKNEDTATYFCAPYDNFFAYWGQGTTLTV SAAKTTTPPSVYPLAPVCGDTTGSSVTLGCLVKGYFPEPVTLTWNSGSLSSGVHTFPAVL QSDLYTLSSSVTVTSSTWPSQSITCNVAHPASSTKVDKKIEPRGPTIKPCPPCKCPAPNA AGGPSVFIFPPKIKDVLMSLSPIVTCVVVDVSEDDPDVQISWVFNNEVHTAQTQTHRE DYNSTLRVVSALPIQHQQDWMSGKEFKCKVNNKDLGAPIERTISKPKGSVRAPQVYVLP PPEEEMTKKQVTLTCMVTDFMPEDIYVEWTNNGKTELNYKNTEPVLDSDGSYFMYSK LRVEKKNWVERNSYSCSVVHEGLHNHHTTKSFSRTPGK**	469
HC-35	QVQLQQSGPELVKPGASVKISCKASGYSTFTNYIHWVKQRPQGQLEWIGWIYPGSGNT NYNEKFKGKATLTADTSSSTTNMQLSSLTSEDSAVYYCSTAPGGFDVWGS GTTVTVSS ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQS SGLYSLSSVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPEFLGGP SVFLFPPKPKDTLMISRTPEVTCVVVDVSDQEDPEVQFNWYVDGVEVHNAKTKPREEQF NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPS QEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTV DKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG**	470

FIG. 26 cont.

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Name	Sequence	SEQ ID NO:
HC-36	QVQLVQSGAEVKKPGASVKVSCKASGYSTFTNYMHVVRQAPGGGLEWMGWYIPGS GNTNYNEKFQGRVTMTADTSISTAYMELSLRLSDDTAVYYCSTAPGGFDVWGQGT TVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPA VLQSSGLYSLSSVVTVPSSSLGKTYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPEF LGGPSVFLFPPKPKDTLMISRTPEVTCVVDVVSQEDPEVQFNWYVDGVEVHNAKTKPR EEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYT LPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSR LTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG	471
HC-37	QVQLVQSGAEVKKPGASVKVSCKASGYSTFTNYIHWVRQAPGQRLEWMGWYIPGS NTNYNEKFQGRVTMTADTSASTTYMELSSRLSEDTAVYYCSTAPGGFDVWGQGT TVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPA VLQSSGLYSLSSVVTVPSSSLGKTYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPEFL GGPSVFLFPPKPKDTLMISRTPEVTCVVDVVSQEDPEVQFNWYVDGVEVHNAKTKPRE EQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTL LPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSR LTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG	472
HC-38	QIQLVQSGPDLKKPGETVKISCKASGYTFTTYVMSWVKQAPGKDLKWMGWINTHSGV PTYADDFKGRFDFSLSETSANTAFLQINNLKNEDTATYFCTRDGNDGDAMDNWGQGT STVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTF PAVLQSSGLYSLSSVVTVPSSSLGKTYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPE FLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVVSQEDPEVQFNWYVDGVEVHNAKTKP REEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVY TLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYS RLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG**	473
HC-39	QVQLKQSGPGLVQPSQSLSTCTVSGFSLTSYGVHVRQPPGKGLEWLGVIWGGSTD YNAAFISRLSISKDNSKQVFFKMNSLQADDTAIYYCAKGPYDYDLGWFAFWGQGT LTVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTF PAVLQSSGLYSLSSVVTVPSSSLGKTYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPE FLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVVSQEDPEVQFNWYVDGVEVHNAKTKP REEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVY TLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYS RLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG**	474
HC-40	QIQLVQSGPELKKPGETVKISCKASGYTFTTYGMSWVKQAPGKGLKWMWINTYSGV PTYADDFKGRFAFSLSETSASTAYLQINNLNEDTATYFCARGPYAMDYWGQGTSTVTS SASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQ SSGLYSLSSVVTVPSSSLGKTYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPEFLGG PSVFLFPPKPKDTLMISRTPEVTCVVDVVSQEDPEVQFNWYVDGVEVHNAKTKPREEQ FNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPS QEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTV DKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG**	475
HC-41	QVQLQPGAEVLPVGGSSVKLSCKASGYTFTNYWIHWVKQRPLQGLEWIGNIDPSDSE THYNQKFKDKATLTVDKSSSTAYMQLSSLTSEDSAVYYCARHGYYDYWGQGTTLTVSS ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQ SSGLYSLSSVVTVPSSSLGKTYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPEFLGG PSVFLFPPKPKDTLMISRTPEVTCVVDVVSQEDPEVQFNWYVDGVEVHNAKTKPREEQ FNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPS QEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTV DKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG**	476

FIG. 26 cont.

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Name	Sequence	SEQ ID NO:
HC-42	QVQLQQPGAELVKPGASVKLSCKASGYTFTSYWMHWVKQRPGQGLEWIGMIHPNSG STDYNEKFKNKATLNVDKSSSTAYIQLSSLTSEDSAVYYCTRWGIYYIYARDYWGQGT TLTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFP AVLQSSGLYSLSSVVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPE FLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAKTKP REEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVY TLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYS RLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG**	477
HC-43	QIQLVQSGPELKKPGETVKISCKASGYTFTTYGMSWVKQAPGKGLKWMGWINTYSGV PTYADDFKGRFAFSLETSTAYLQINNLIKNEDTATYFCAPVEYDGYWGGQGLTVT VSAASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFP AVLQSSGLYSLSSVVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPEFL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAKTKPRE EQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTL PPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRL TVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG**	478
HC-44	EVQLQQSGPELVKPGASVKISCKASGYTFTDYIMNWVKQSHGKSLEWIGDINPNNGG TNYNQKFKGKATLTVDKSSSTAYMELRSLTSEDSAVYYCTSGYGFYWGQGLTVTVS AASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFP AVLQSSGLYSLSSVVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPEFL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAKTKPRE EQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTL PPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRL TVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG**	479
HC-45	QIQLVQSGPELKKPGETVKISCKASGYTFTTYGMGWVKQAPGKGLKWMGWINTYSGV PTYADDFKGRFAFSLETSTAYLQINNLIKNEDMATYFCATPYEYDGYWGGQGLTVT VSAASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFP AVLQSSGLYSLSSVVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPEFL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAKTKPRE EQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTL PPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRL TVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG**	480
HC-46	QVQLQQSGPELVKPGDSVKISCKAAGYTFSDYYINWVKQRPGQGLEWIGWIYVSVNT KYNEKFKGKATLTVDTSSSTAYMQLSSLTSEDSGVYFCAYLDYWGQGLTVTVS AASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFP AVLQSSGLYSLSSVVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPEFL GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAKTKPRE EQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTL PPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRL TVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG**	481
HC-47	QVQLKQSGPGLVQPSQSLITCTVSGFSLTSYGVHWVRQAPGKGLEWLGVIWGGSTD YNAAFMSRLSISKDNSKQVFFKMNSLQADDTAIYYCAKSPDGYDVAWFGYWGQGL TVTVSAAASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFP AVLQSSGLYSLSSVVTVPSSSLGKTKYTCNVDHKPSNTKVDKRVESKYGPCCPPCPAPE FLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAKTKP REEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVY TLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYS RLTVDKSRWQEGNVFSCSVMEALHNHYTQKSLSLGLG**	482

FIG. 26 cont.

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Name	Sequence	SEQ ID NO:
LC-1	MDMRVPAQLLGLLLLWLRGARC DIVLTQSPLSLPVTGP EPASISCRSSKSLLYKDGKTY LNWFLQKPGQSPQLLIYLMSTHASGV PDRFSGSGSGTDFTLKISRVEAEDVG VYYCQQ LVDYPLTFGGG TKLEIKRTVAAPS VFIFPPSDEQLKSGTASVVC LLNNFY PREAKVQWK VDNALQSGNSQESVTEQDSKDSTYSLSS TLTL SKADYEKHKVYACEVTHQGLSSPVTK SFNRGEC	217
LC-1	METDTLLLWVLLLWVPGSTGDIVMTQTPLSLSVTPGQPASISCKSSKSLHSDGITYLY WYLQKPGQSPQLLIYRMSNLASGV PDRFSGSGSGTDFTLKISRVEAEDVG VYYCAQML EFPLTFGQGT KLEIKRTVAAPS VFIFPPSDEQLKSGTASVVC LLNNFY PREAKVQWKVD NALQSGNSQESVTEQDSKDSTYSLSS TLTL SKADYEKHKVYACEVTHQGLSSPVTKSF NRGEC	218
LC-3	METDTLLLWVLLLWVPGSTGDILMTQSPSSMSVSLGDTV SITCHASQGINSNMGWLQQ KPGKSFKGLIYHATNLEDGVPSRFSGSGSGADYSLTISSELEDFADYYCVQY AQFPPTF GSGTKLEIKRADV APTVSIFPPSSEQLTSGGASVVC FLNNFY PKDINV KWKIDG SERQN GVLNSWTDQDSKDSTYSMSSTLTLTKDEYERHNSYTCEATHKTSTSPIVKSFNRNEC	219
LC-4	METDTLLLWVLLLWVPGSTGDVVMQTPLTSLVAIGQPASISCKSSQSLLYTNGKTYL NWLLQRPQGSPKRLIYLLSKLD SGVPDRFSASGSGTDFTLKISRVEAEDLG VYYCLQST HFPLTFGAGTKLEMKRADV APTVSIFPPSSEQLTSGGASVVC FLNNFY PKDINV KWKID GSERQNGVLNSWTDQDSKDSTYSMSSTLTLTKDEYERHNSYTCEATHKTSTSPIVKSF NRNEC	220
LC-5	METDTLLLWVLLLWVPGSTGDVVMQTPLTSLVTIGQPASISCKSSQSLFSDGKTYLN WLLQRPQGSPKRLIYLVSKLD SGVPDRFTGSGSGTDFTLKISRVEAEDLG VYYCWQGT HFPLTFGAGTKLEMKRADV APTVSIFPPSSEQLTSGGASVVC FLNNFY PKDINV KWKID GSERQNGVLNSWTDQDSKDSTYSMSSTLTLTKDEYERHNSYTCEATHKTSTSPIVKSF NRNEC	221
LC-6	METDTLLLWVLLLWVPGSTGDVLMQTPLSLPVSLGDQASISCRSSQSIVHNNNGNTYL EWYLQKPGQSPKLLIYKVS NRFSGV PDRFSGSGSGTDFTLKISRVEAEDLG VYYCFQGS HVPLTFGGG TKLELKRADV APTVSIFPPSSEQLTSGGASVVC FLNNFY PKDINV KWKID GSERQNGVLNSWTDQDSKDSTYSMSSTLTLTKDEYERHNSYTCEATHKTSTSPIVKSF NRNEC	222
LC-7	METDTLLLWVLLLWVPGSTGDIQMTQTSSLSASLGDRVTISCSASQGINNYLNWYQQ KPDGTVKLLIYYASSLHSGVPSRFSGSGSGTDYSLTISNLEPEDIATYYCQQYSQVPYTF GSGTKLEIKRADV APTVSIFPPSSEQLTSGGASVVC FLNNFY PKDINV KWKIDG SERQN GVLNSWTDQDSKDSTYSMSSTLTLTKDEYERHNSYTCEATHKTSTSPIVKSFNRNEC	223
LC-8	METDTLLLWVLLLWVPGSTGDIQMNQSPSSLSASLGDTTITCRASQNIYIWLWSYQQK PGNIPKLLIYKASNLHTGVPSRFSGSGSGTDFTLTISTLQPEDIA TYFCLQGQSYPLTFGA GTKLEMKRADV APTVSIFPPSSEQLTSGGASVVC FLNNFY PKDINV KWKIDG SERQNG VLNSWTDQDSKDSTYSMSSTLTLTKDEYERHNSYTCEATHKTSTSPIVKSFNRNEC	224
LC-9	METDTLLLWVLLLWVPGSTGDIQMTQTSSLSASLGDRVTINCSASQDISNYLNWYQQ KPDGTVKLLIYYTSSLLSGVPSRFSGSGSGTDYSLTISNLEPEDIATYFCQQYSKLPYTFG SGTHLEIKRADV APTVSIFPPSSEQLTSGGASVVC FLNNFY PKDINV KWKIDG SERQNG VLNSWTDQDSKDSTYSMSSTLTLTKDEYERHNSYTCEATHKTSTSPIVKSFNRNEC	225
LC-10	METDTLLLWVLLLWVPGSTGDIVMTQA AFSNPVTLGTSASISCRSSKSLHSDGITYLY WYLQRPQGSPQLLIYRMSNLASGV PDRFSGSGSGTDFTLRISRVEAEDVG VYYCAQMI EFPLTFGAGTILELKRADV APTVSIFPPSSEQLTSGGASVVC FLNNFY PKDINV KWKIDG SERQNGVLNSWTDQDSKDSTYSMSSTLTLTKDEYERHNSYTCEATHKTSTSPIVKSFNR NEC	226
LC-11	METDTLLLWVLLLWVPGSTGDVVMQTPLTSLVAIGQPASISCKSSQSLLYTNGKTYL NWLLQRPQGSPKRLIYLVSKLD SGVPDRFSGSGSGTDFTLKISRVEAEDLG VYYCLQST HFPLTFGAGTKLELKRADV APTVSIFPPSSEQLTSGGASVVC FLNNFY PKDINV KWKID GSERQNGVLNSWTDQDSKDSTYSMSSTLTLTKDEYERHNSYTCEATHKTSTSPIVKSF NRNEC	227

FIG. 27

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Name	Sequence	SEQ ID NO:
LC-12	METDTLLLVVLLLVVPGSTGDVLTQTPLSLPVLGDAQASISCRSSQSIVHSNGNTYLE WYLQKPGQSPKLLIYKVSNNRFGVDPDRFSGSGSGTDFTLKISRVEAEDLGVYYCFQGS H VPLTFGAGTKLELKRADVAPTIVSIFPPSSEQLTSGGASVVCFLNNFYPKDINVKWKIDG SERQNGVLNSWTDQDSKDYSTYSMSSTLTLTCKDEYERHNSYTCEATHKSTSTSPIVKSFNR NEC	228
LC-13	NIWLTQSPSSLAVSAGEMVTMTCKSSQSVLYSSNQKNYLAWYQQKPGQSPKLLIYWA STRESGVPDRFTGSGSGTDFSLTISSVQAEDLAVYYCHQYLSSTLTFGAGTKLELKR TVA APSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK DYSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	229
LC-14	NIMMTQSPSSLAVSAGEKVTMSCKSSQSVLYSSNQKNYLAWYQQKPGQSPKLLIYWA STRESGVPDRFTGSGSGTDFSLTISSVQPEDLAVYYCHQYLSSTLTFGAGTKLELKR TVA APSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK DYSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	230
LC-15	NIMMTQSPSSLAVSAGQKVTMSCKSSQSVLYSSNQKNYLAWYQQKPGQSPKLLIYWA STRESGVPDRFSGSGSGTDFSLTISSVQPEDLAVYYCHQYLSSTLTFGAGTKLELKR TVA APSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK DYSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	231
LC-16	DVVMTQTPLSLPVLGDAQASISCRSSQSLVHNSGNTYLHWYLQRPQSPNLLIYKVS NR FSGVPDRFSGSGSGTDFSLTISSVQAEDLGVYFCSQSTHVPPTFGGGTKLEIKR TVA APS VFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK DYSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	232
LC-17	QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGINNR VP GVPARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHWVFGGGTKLTVLR TVA APS VFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK DYSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	233
LC-18	DIVMTQAAFSNPVTLTGTSASISCRSSKSLHTNGITFLYWYLQKPGQSPQPLIYQMS NLA SGVPDRFSSSGSGTDFSLRISRVEAEDVGYYCAQNLLELPWTFGGGKLEINR TVA APS VFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK DYSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	234
LC-19	NIMMTQSPSSLAVSAGEKVTMSCKSSQSVLYSSNQKNYLAWYQQKPGQSPKLLIYWA STRESGVPDRFTGSGSGTDFSLTISSVQAEDLAVYYCHQYLSSTLTFGAGTKLELKR TVA APSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK DYSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	235
LC-20	DIVMTQSPSSLAMSVGQKVTMSCKSSQSLNNSNQKNYLAWYQQKPGQSPKLLIYFA STRESGVPDRFIGSGSGTDFSLTISSVQAEDLADYFCQOHYSTPYTFGGGAKLEIKR TVA APSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK DYSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	236
LC-21	DIRMTQSPSSLSASLGDTITITCHASQININWLSWYQQKPGNIPKLLIYKASNLHTG VPS RFSGSGSGTGFTLTISLQPEDATYYCQQGQSYPTTFGGGKLELKR TVA APSVFIFPPS DEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK DYSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	237
LC-22	EIVLTQSPASLSVTTGEKVTIRCTISIDIDDDMNWYQQKPGEPKLLISEGNTLRPGV PSR FSSSGYGTDFVFTIENTLSEADVADYYCLQSDNKPLTFGAGTKLELKR TVA APSVFIFPPS DEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK DYSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	238
LC-23	DIQVIQSPSSLSASLGDTITITCHASQININWLSWYQQKPGNIPKLLIYKASNLHTG VPSR FSGSGSGTGFTLTISLQPEDATYYCQQGQSYPTTFGGGKLELKR TVA APSVFIFPPS DEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK DYSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	239

FIG. 27 cont.

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Name	Sequence	SEQ ID NO:
LC-24	EIKMNQSPSSLSASLGDTITITCHASQNINWLSWYQQKPGNIPKLLIYKASNLHTGVPS RFSGSGSGTGFTLTISLQPEDATYYCQQGQSYPTFGGGTKLELKRTVAAPSVFIFPPS DEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYLSSTL TLISKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	240
LC-25	QAVVTQESALTTSPGETVTLTCRSSTGAVTTSNYANWVQEKPDHLFTGLIGGTNNRAP GVPARFSGSLIGDKAALTITGAQTEDEAIYFCALWYSNHLVFGGGTKLTVLRTVAAPSV FIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSY LSSTLTLISKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	241
LC-26	DVLMTQTPLSLPVS LGDQASISCRSSQDIVHSSGNTYLEWYLQKPGQSLKLLIYKVSNR FSGVPDRFSGSGSGTDFTLKISRVEAEDLGVYYCFQGSHVPTFGSGTKLEIKRTVAAPS VFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDS YLSSTLTLISKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	242
LC-27	DIGMRQAAFSNPVTLGTSASISCRSSKSLYSNGITYLYWFLQKPGQSPQLLIYQMSNLA SGVPDRFSSSGSGTDFTLRISRVEADLVGVYYCAQNLELPWTFGGGTKLEIKRTVAAPS VFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDS YLSSTLTLISKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	243
LC-28	DIVLTQSPASLGVS LGQRATISCRASKSVSTSGYSYMHWYQQKPGQPPKLLIYLASILES GVPARFSGSGSGTDFTLNHPVEEEDAAIYYCQHSRELPLTFGAGTKLELKRTVAAPSV FIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSY LSSTLTLISKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC*	483
LC-29	NIVLTQSPASLAVSLGQRATISCRASESVDSYGSNFMHWYQQKPGQPPKLLIYLASNLE SGVPARFSGSGSRTDFTLTIDPVEADDAATYYCQQNNEDPWTFGGGTKLEIKRTVAAP SVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDS YLSSTLTLISKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC*	484
LC-30	DVVMQTPLTSLSVTIGQPASISCKSSQSLLYSNGKTYLNWLLQRPQGSPKRLIYLVSKL DSGVPDRFTGSGSGTDFTLKISRVEAEDLGVYYCVQGTHFPQTFGGGTKLEIKRTVAAP SVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDS YLSSTLTLISKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC*	485
LC-31	DIVITQDELSNPVTSGESVSISCRSSKSLLYKDGKTYLNWFLQRPQGSPQLLIYLMSTHA SGVSDRFSGSGSGTDFTLEISRKAEDVGYYCQQLVDYPLTFGAGTKLELKRADVAP TVSIFPPSDEQLTSGGASVVCFLNFPKIDINVKWKIDGSEKQNGVLNSWTDQDSKDS YSMSSTLTLTDEYERHNSYTCEATHKTSTSPIVKSFNRNEC**	486
LC-32	DIVMTQAAFSNPVTLGTSASISCRSSKSLHSDGITYLYWYLQRPQGSPQLLIYRMSNLA SGVPDRFSGSGSGTDFTLRISRVEAEDVGYYCAQMLEFPLTFGAGTKLELKRTVAAPS VFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDS YLSSTLTLISKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC*	487
LC-33	DIVMTQTPLSLSVTPGQPASISCKSSKSLHSDGITYLYWYLQKPGQSPQLLIYRMSNLA SGVPDRFSGSGSGTDFTLKISRVEAEDVGYYCAQMLEFPLTFGQGTKEIKRTVAAPS VFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDS YLSSTLTLISKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	488
LC-34	DIVMTQSPLSLPVTGPGEASISCRSSKSLHSDGITYLYWYLQKPGQSPQLLIYRMSNLA SGVPDRFSGSGSGTDFTLKISRVEAEDVGYYCAQMLEFPLTFGQGTKEIKRTVAAPS VFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDS YLSSTLTLISKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC	489
LC-35	DVVMQTPLTSLSVTIGQPASISCKSSQSLLYTDGKTYLSWFLQRPQGSPKRLIYLVSKLD SGVPDRFSGSGSGTDFTLKISRVEAEDLGVYYCLQSTHFPPLTFGAGTKLEVKTVAAPS VFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDS YLSSTLTLISKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC*	490

FIG. 27 cont.

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Name	Sequence	SEQ ID NO:
LC-36	SIVMTQTPKFLLVSAGDRVITITCKASQSVSNDVAWYQQKPGQSPKLLIYYASNRYTGV PDRFTGSGYGTDFITISTVQAEDLAVYFCQQDYTSPTYFGGGTKLEIKRTVAAPSVFIF PPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSL STLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC*	491
LC-37	DIQMTQTSSLSASLGDRVITISCSAQGISNYLNWYQQKPDGTVKLLIYYTSSLHSGVPS RFGSGSGTDYSLTISNLEPEDIATYYCQQYSELPTYFGSGTKLEIKRTVAAPSVFIFPPS DEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSSLT LSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC*	492
LC-38	DIVMTQSHKFMSTSVGDRVSITCKASQDVSTAVAWYQQKPGQSPKLLIYWASTRHTG VPDRFTGSGSGTDYTLTISSVQAEDLALYYCQQHYTTPFTFGAGTKLELKRTVAAPSVF IFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSL LSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC*	493
LC-39	DIVMTQSQKFMSTSVGERVSITCKASQNVGTNVAWYQQKAGQSLELLIYGASNRHTG VPDRFTGSGSGTDFTLTITNVQSEDMTNYFCEQYSNPLTFGAGTKLELKRTVAAPSVFI FPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSL SSLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC*	494
LC-40	DVVMQTQPLTSLVTIGQPASISCKSSQSLFHS DGKTYLNWLLQRPQGSPKRLIYLVSKL DSGVPDRFTGSGSGTDFTPKISRVEDEDLGVYYCWQGTHFPLTFGAGTKLEMKRTVAA PSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK STYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC*	495
LC-41	DIQMNQSPSSLSASLGDTISITCRASQNNIWLWYQQKPGNIPQLLIYKASNLHTGVPSR FSGSGSGTDFTLTISLQPEDATYYCLQGQSYPLTFGAGTKLV MKRTVAAPSVFIFPPS DEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSSLT LSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC*	496
LC-42	DVVMQTQPLTSLVTIGQPASISCKSSQSLHSDGKTYLNWLLQRPQGPPKRLMYLVSTL DSGVPDRFTGSGSGTDFTLKISRVEAEDLGVYYCWQGTHFPLTFGAGTKPERTVAAPS VFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDY YLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC*	497
LC-43	DIVMTQAAFSNPVTLGTSASISCRSSKSLHSDGITYFYWYLQRPQGSPQLLIYRMSNLA SGVPDRFSGSGSGTDFTLRISRVEAEDVGVYYCAQMLEFPLTFGAGTKLERTVAAPSVF IFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSL LSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC*	498
LC-44	DIVMTQSHKFMSTSVGDRVSITCKASQDVRTAVAWYQQKPGQSPKLLIYWASTRHTG VPDRFTGSGSGTDFTLTLSNVQSEDLADYFCQQYSSYPWTFGGGTKLEIKRTVAAPSVF IFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSL LSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC*	499

FIG. 27 cont.

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Exemplary Combination #	V_H-CDR1 SEQ ID NO:	V_H-CDR2 SEQ ID NO:	V_H-CDR3 SEQ ID NO:
1	27	45	61
2	28	46	62
3	29	47	63
4	30	48	64
5	31	48	65
6	32	49	66
7	31	48	67
8	33	50	68
9	34	51	67
10	29	52	69
11	35	53	66
12	36	54	70
13	36	54	71
14	37	54	72
15	38	55	73
16	36	54	74
17	39	56	75
18	40	57	76
19	41	54	77
20	42	58	78
21	36	54	77
22	38	59	79
23	43	60	80
24	44	56	81
25	245	247	249
26	246	248	250
27	29	54	407
28	36	400	408
29	31	401	409
30	397	402	410
31	27	403	411
32	398	404	412
33	31	48	413
34	29	405	68
35	31	48	414
36	399	406	415
37	397	402	416

FIG. 28

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Exemplary Combination #	V_L-CDR1 SEQ ID NO:	V_L-CDR2 SEQ ID NO:	V_L-CDR3 SEQ ID NO:
1	82	102	117
2	83	103	118
3	84	104	119
4	85	105	120
5	86	106	121
6	87	107	122
7	88	108	123
8	89	109	124
9	90	110	125
10	83	103	126
11	85	106	120
12	91	107	122
13	92	111	127
14	93	111	127
15	94	107	128
16	95	112	129
17	96	113	130
18	97	114	131
19	98	109	132
20	99	115	133
21	95	116	134
22	100	107	135
23	101	113	130
24	251	253	254
25	252	253	255
26	417	427	429
27	418	106	120
28	419	108	430
29	420	110	431
30	421	111	432
31	422	428	433
32	423	106	121
33	424	109	124
34	425	106	121
35	426	111	434

FIG. 29

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Antibody	V _H -CDR1 SEQ ID NO:	V _H -CDR2 SEQ ID NO:	V _H -CDR3 SEQ ID NO:	V _L -CDR1 SEQ ID NO:	V _L -CDR2 SEQ ID NO:	V _L -CDR3 SEQ ID NO:
TB001 (IMT001-4)	27	45	61	82	102	117
TB006 (4A11.H3L1)	28	46	62	83	103	118
12G5.D7	29	47	63	84	104	119
13A12.2E5	30	48	64	85	105	120
14H10.2C9 (14H10)	31	48	65	86	106	121
15F10.2D6 (15F10)	32	49	66	87	107	122
19B5.2E6 (19B5)	31	48	67	88	108	123
20D11.2C6 (20D11)	33	50	68	89	109	124
20H5.A3 (20H5)	34	51	67	90	110	125
23H9.2E4 (23H9)	31	48	67	88	108	123
2D10.2B2 (2D10)	29	52	69	83	103	126
3B11.2G2 (3B11)	30	48	64	85	106	120
7D8.2D8 (7D8)	35	53	66	91	107	122
F846C.1B2	36	54	70	92	111	127
F846C.1F5 (846.1F5)	36	54	71	92	111	127
F846C.1H12 (846.1H12)	37	54	72	93	111	127
F846C.1H5 (846.1H5)	38	55	73	94	107	128
F846C.2H3 (846.2H3)	36	54	71	92	111	127
F846TC.14A2 (846T.14A2)	36	54	74	95	112	129
F846TC.14E4 (846T.14E4)	39	56	75	96	113	130
F846TC.16B5 (846T.16B5)	36	54	71	92	111	127
F846TC.7F10 (846T.7F10)	40	57	76	97	114	131
F847C.10B9 (847.10B9)	41	54	77	98	109	132
F847C.11B1 (847.11B1)	42	58	78	99	115	133
F847C.12F12 (847.12F12)	36	54	77	98	109	132
F847C.26F5 (847.26F5)	41	54	77	98	109	132
F847C.4B10 (847.4B10)	38	59	79	95	116	134
F849C.8D10 (849.8D10)	43	60	80	100	107	135
F849C.8H3	44	56	81	101	113	130
846.2B11	245	247	249	251	253	254
846.4D5	246	248	250	252	253	255
847.14H4	29	54	407	95	116	134
846T.1H2	36	400	408	417	427	429
mIMT001	27	45	61	82	102	117
4A11.2B5	28	46	62	83	103	118
4A11.H1L1	28	46	62	83	103	118
4A11.H4L2	28	46	62	83	103	118
4G2.2G6	31	401	409	418	106	120
6B3.2D3	397	402	410	419	108	430
6H6.2D6	31	48	67	420	110	431
9H2.2H10	27	403	411	421	111	432
13G4.2F8	398	404	412	422	428	433
13H12.2F8	31	48	413	423	106	121
15G7.2A7	29	405	68	424	109	124
19D9.2E5	31	48	414	425	106	121
23B10.2B12	399	406	415	83	103	118
24D12.2H9	397	402	416	426	111	434

FIG. 30

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Antibody	Heavy chain variable region (V_H) SEQ ID NO:	Light chain variable region (V_L) SEQ ID NO:
TB001 (IMT001-4)	136	161
TB006 (4A11.H3L1)	137	162
12G5.D7	138	163
13A12.2E5	139	164
14H10.2C9 (14H10)	140	165
15F10.2D6 (15F10)	141	166
19B5.2E6 (19B5)	142	167
20D11.2C6 (20D11)	143	168
20H5.A3 (20H5)	144	169
23H9.2E4 (23H9)	142	167
2D10.2B2 (2D10)	145	170
3B11.2G2 (3B11)	139	171
7D8.2D8 (7D8)	146	172
F846C.1B2 (846.1B2)	147	173
F846C.1F5 (846.1F5)	148	174
F846C.1H12 (846.1H12)	149	175
F846C.1H5 (846.1H5)	150	176
F846C.2H3 (846.2H3)	148	174
F846TC.14A2 (846T.14A2)	151	177
F846TC.14E4 (846T.14E4)	152	178
F846TC.16B5 (846T.16B5)	153	179
F846TC.7F10 (846T.7F10)	154	180
F847C.10B9 (847.10B9)	155	181
F847C.11B1 (847.11B1)	156	182
F847C.12F12 (847.12F12)	157	183
F847C.26F5 (847.26F5)	155	184
F847C.4B10 (847.4B10)	158	185
F849C.8D10 (849.8D10)	159	186
F849C.8H3 (849.8H3)	160	187
846.2B11	256	258
846.4D5	257	259
847.14H4	435	185
846T.1H2	436	451
mIMT001	437	452
4A11.2B5	438	453
4A11.H1L1	439	162
4A11.H4L2	440	454
4G2.2G6	441	455
6B3.2D3	442	456
6H6.2D6	443	457
9H2.2H10	444	458
13G4.2F8	445	459
13H12.2F8	446	460
15G7.2A7	447	461
19D9.2E5	448	462
23B10.2B12	449	463
24D12.2H9	450	464

FIG. 31

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Antibody	Heavy chain SEQ ID NO:	Light chain SEQ ID NO:
TB001 (IMT001-4)	188	217
TB006 (4A11.H3L1)	189	218
12G5.D7	190	219
13A12.2E5	191	220
14H10.2C9 (14H10)	192	221
15F10.2D6 (15F10)	193	222
19B5.2E6 (19B5)	194	223
20D11.2C6 (20D11)	195	224
20H5.A3 (20H5)	196	225
23H9.2E4 (23H9)	197	223
2D10.2B2 (2D10)	198	226
3B11.2G2 (3B11)	199	227
7D8.2D8 (7D8)	200	228
F846C.1B2 (846.1B2)	201	229
F846C.1F5 (846.1F5)	202	230
F846C.1H12 (846.1H12)	203	231
F846C.1H5 (846.1H5)	204	232
F846C.2H3 (846.2H3)	205	230
F846TC.14A2 (846T.14A2)	206	233
F846TC.14E4 (846T.14E4)	207	234
F846TC.16B5 (846T.16B5)	208	235
F846TC.7F10 (846T.7F10)	209	236
F847C.10B9 (847.10B9)	210	237
F847C.11B1 (847.11B1)	211	238
F847C.12F12 (847.12F12)	212	239
F847C.26F5 (847.26F5)	213	240
F847C.4B10 (847.4B10)	214	241
F849C.8D10 (849.8D10)	215	242
F849C.8H3 (849.8H3)	216	243
847.14H4	467	241
846T.1H2	468	485
mIMT001	469	486
4A11.2B5	470	487
4A11.H1L1	471	488
4A11.H4L2	472	489
4G2.2G6	473	490
6B3.2D3	474	491
6H6.2D6	475	492
9H2.2H10	476	493
13G4.2F8	477	494
13H12.2F8	478	495
15G7.2A7	479	496
19D9.2E5	480	497
23B10.2B12	481	498
24D12.2H9	482	499

FIG. 32

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Antibody	Peptides bound	Bins
TB001 (IMT001-4)	5, 6	1
TB006 (4A11.H3L1)	6	3
12G5.D7	n/a	10
13A12.2E5	4,[6]	7
14H10.2C9 (14H10)	6,7	8
15F10.2D6 (15F10)	2,3,[4]	8
19B5.2E6 (19B5)	n/a	3
20D11.2C6 (20D11)	n/a	5
20H5.A3 (20H5)	n/a	3
23H9.2E4 (23H9)	1,[6],7,[8]	3
2D10.2B2 (2D10)	n/a	3
3B11.2G2 (3B11)	n/a	7
7D8.2D8 (7D8)	2,3[17]	8
F846C.1B2	[5],6,[7]	17
F846C.1F5 (846.1F5)	6,[17]	17
F846C.1H12 (846.1H12)	[5],6,[17]	17
F846C.1H5 (846.1H5)	1	n/a
F846C.2H3 (846.2H3)	6,17	17
F846TC.14A2 (846T.14A2)	[1],7,8	n/a
F846TC.14E4 (846T.14E4)	2	8
F846TC.16B5 (846T.16B5)	6,[17]	17
F846TC.7F10 (846T.7F10)	1	8
F847C.10B9 (847.10B9)	1,7	n/a
F847C.11B1 (847.11B1)	[17]	n/a
F847C.12F12 (847.12F12)	1,7	n/a
F847C.26F5 (847.26F5)	1,7	49
F847C.4B10 (847.4B10)	1	n/a
F849C.8D10 (849.8D10)	2,3	8
F849C.8H3	2,[17]	n/a
846.2B11	n/a	16
846.4D5	n/a	24

*Parentheses for peptides bound (e.g. [6]) denote peptides that bound to the antibody weakly.

FIG. 33

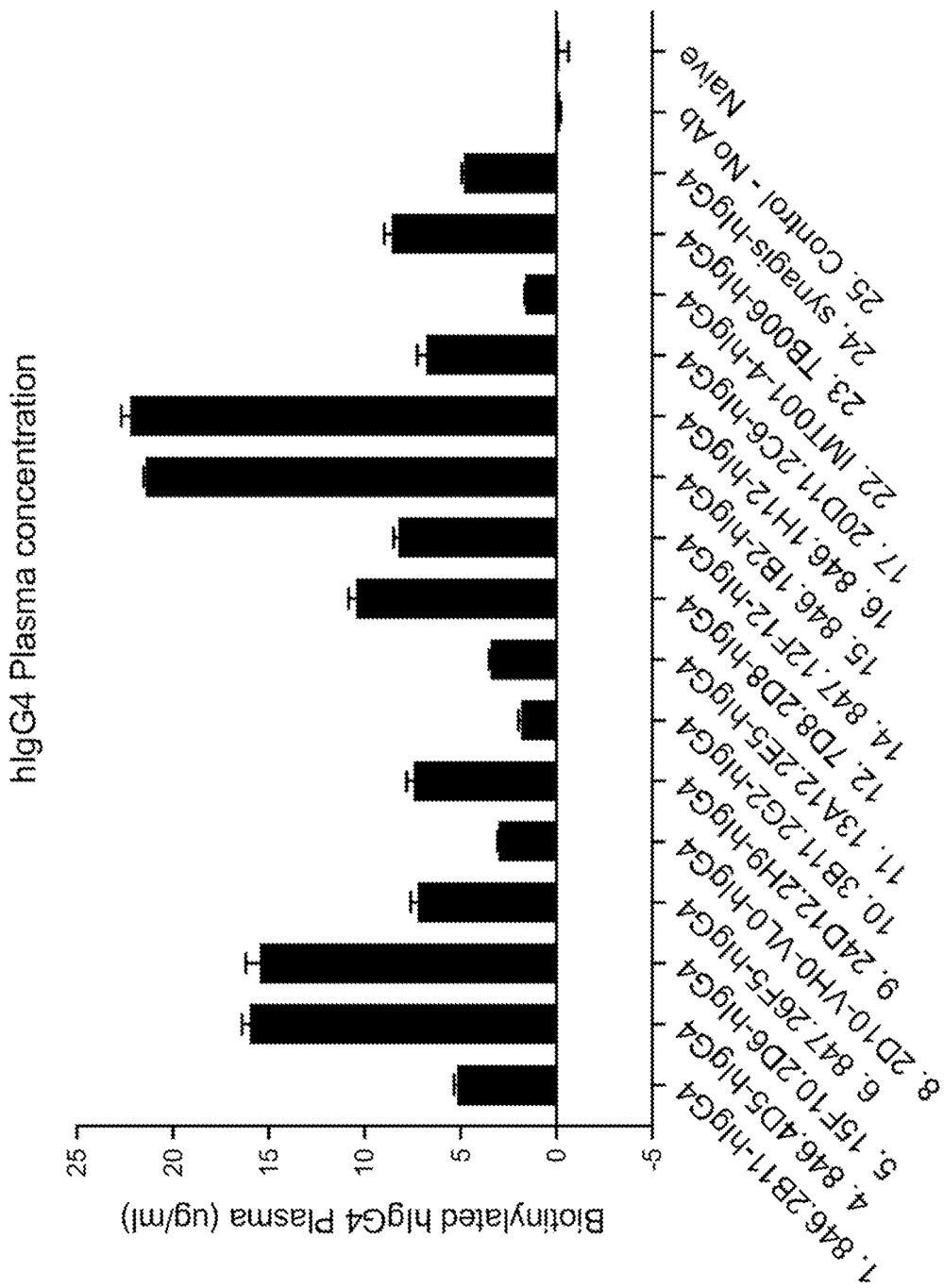


FIG. 34A

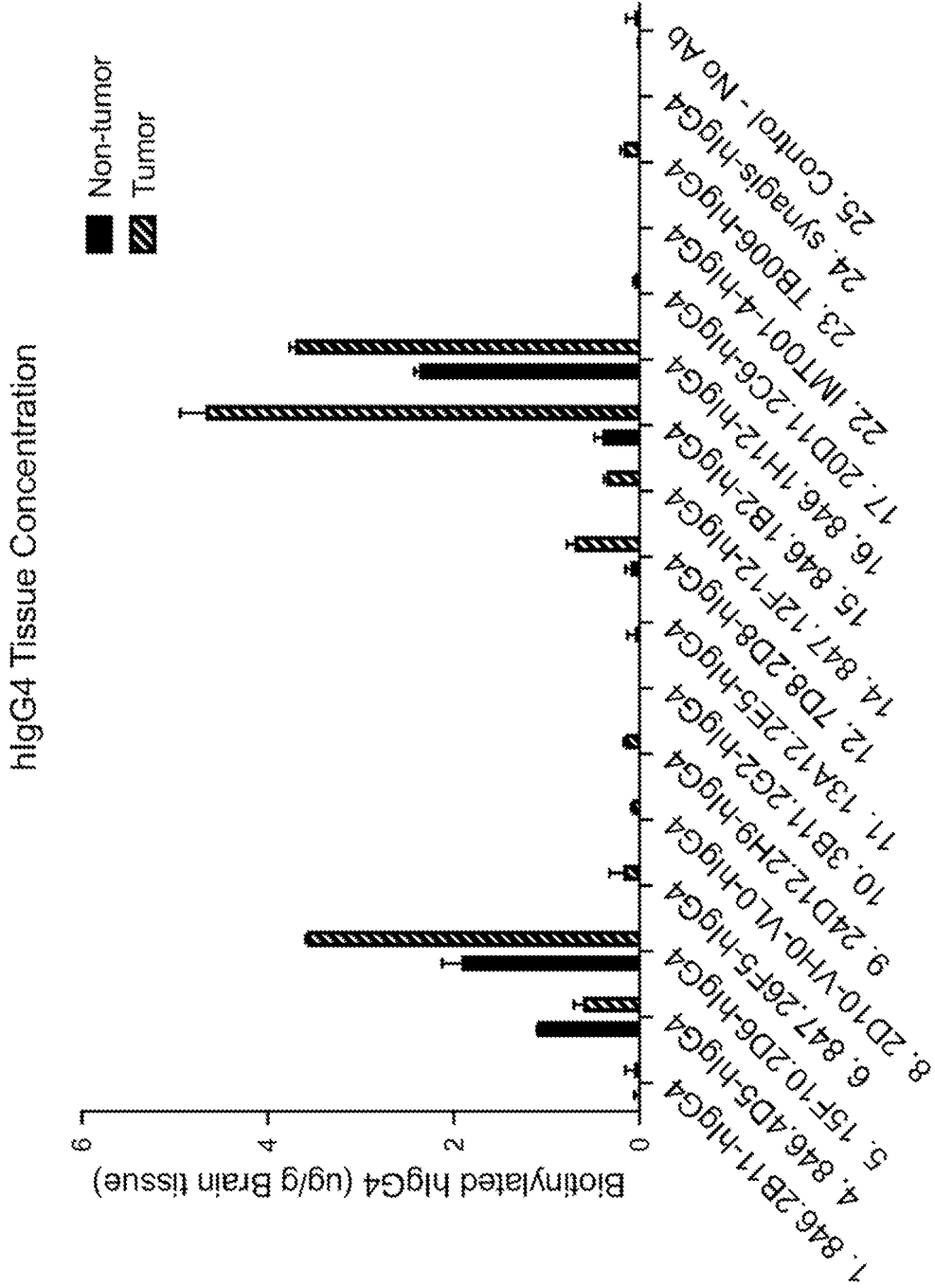


FIG. 34B

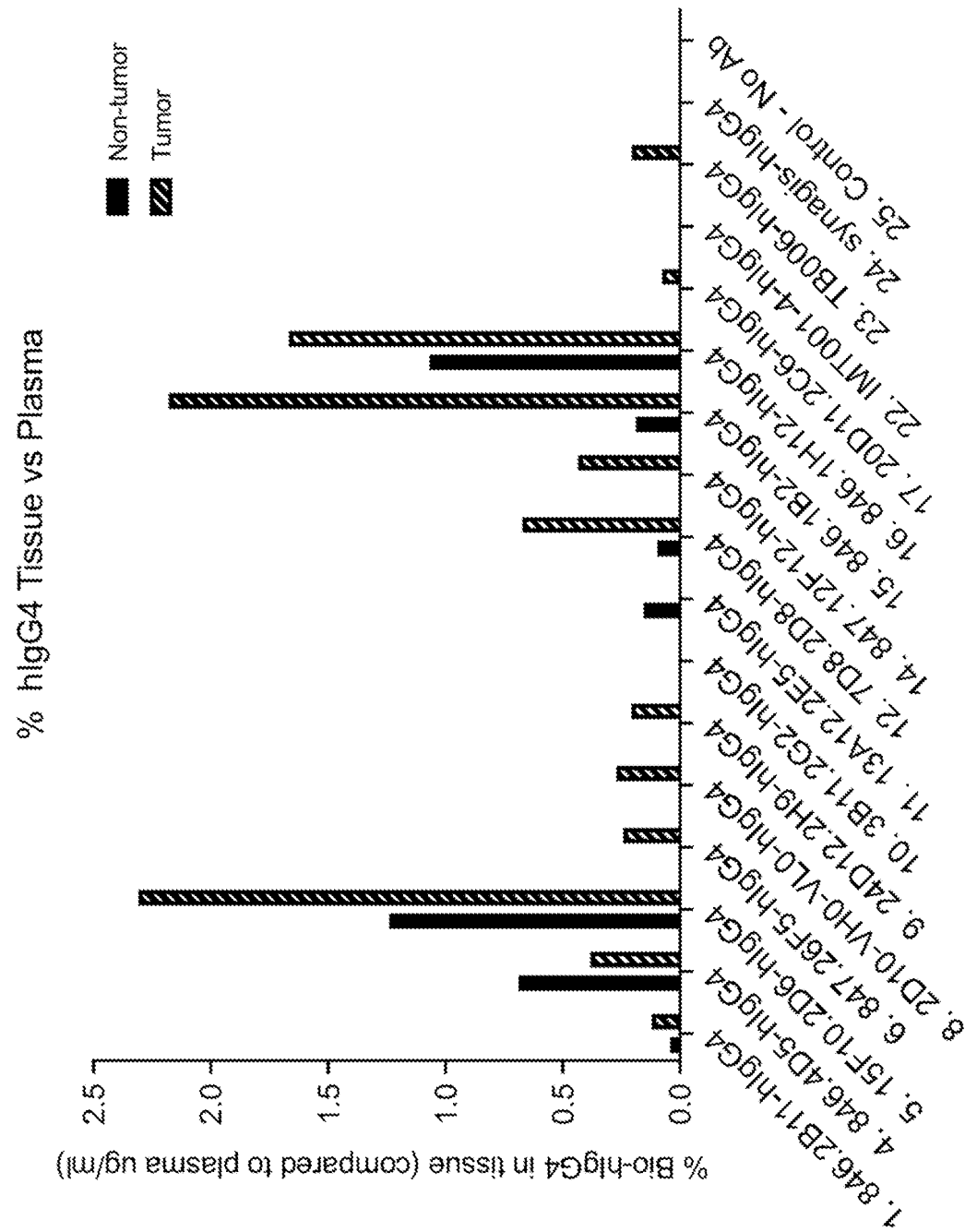


FIG. 34C

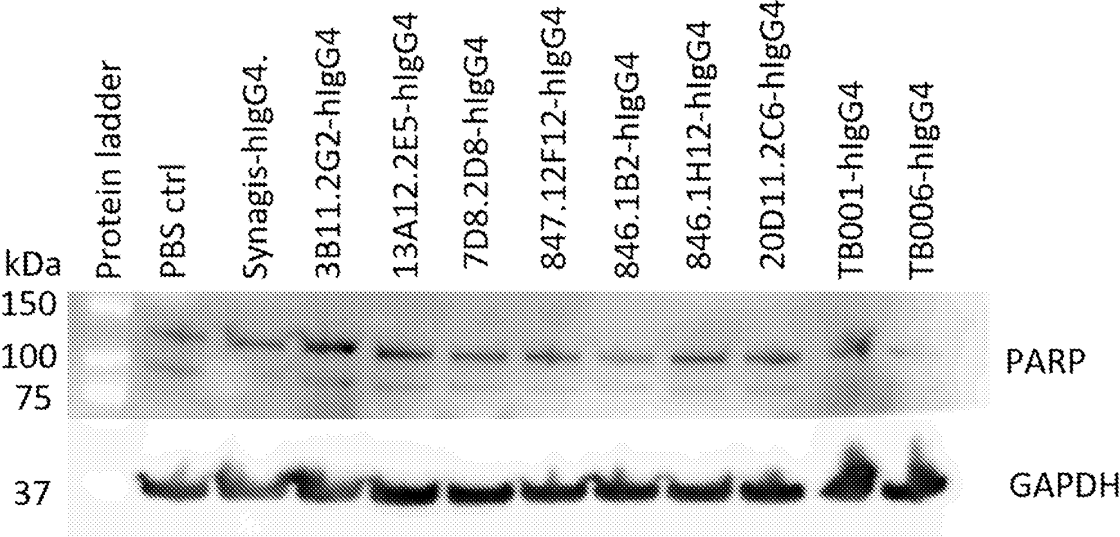


FIG. 34D

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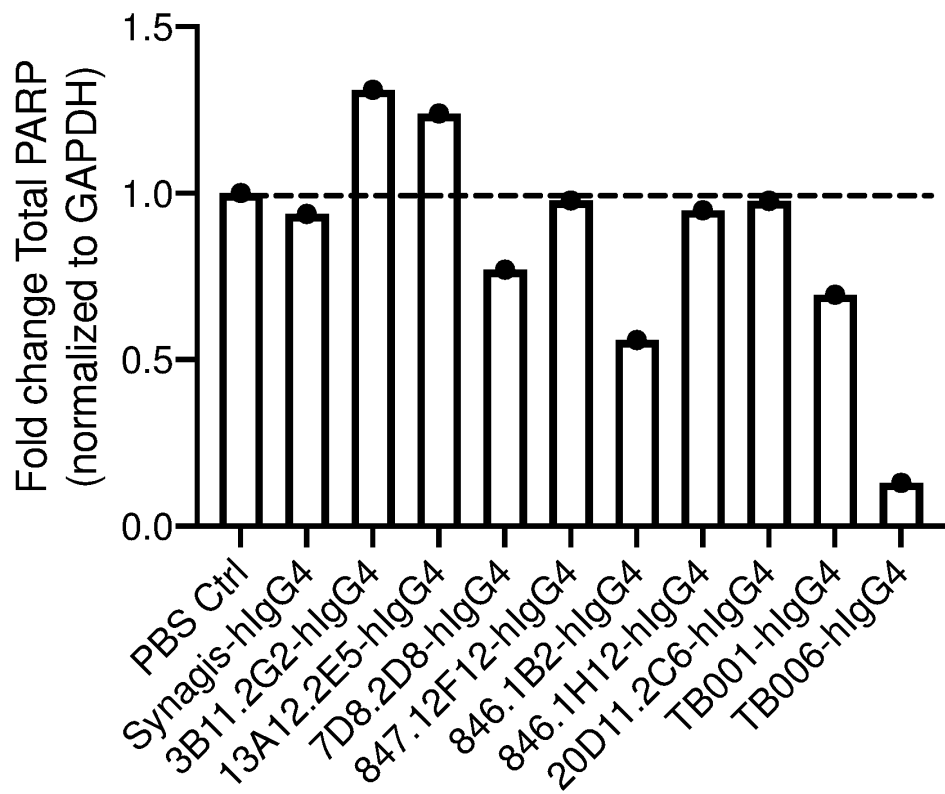


FIG. 34E

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bi n	ab name	VH CDR1	VH CDR2	VH CDR3	VL CDR1	VL CDR2	VL CDR3
1	846T.1 H2	GYFTN YG	INTNTGES	QPGGVGTGLTT	---QSLLYSNGKTY-	LVS	VQGTFFPQT
1	mIMT 001	GYFTN Y-	-NTNTGE-	APYDNFFAY	RSSKSLLYKDGKTYLN	LMSTHAS	QQLVDYPLT
	alignm ent	***** *-	-*****-	QPGGVGTGLTT----- -----APYDNFFAY ----- .-----	---QSLLYSNGKTY- RSSKSLLYKDGKTYLN ---:****. :*****--	LVS----- LMSTHAS *: *-----	- * . . : * *
		SEQ ID NO: 269	SEQ ID NO: 270	SEQ ID NO: 271 Xn1Xn2Xn3Xn4Xn5Xn6Xn7X n8Xn9Xn10Xn11Xn12Xn13X n14Xn15 wherein Xn1 = Q or absent, Xn2 = P or absent, Xn3 = G or absent, Xn4 = G or absent, Xn5 = V or absent, Xn6 = T or absent, Xn7 = G or A, Xn8 = T or P, Xn9 = L or Y, Xn10 = T or D, Xn11 = T or N, Xn12 = F or absent, Xn13 = F or absent, Xn14 = A or absent, Xn15 = Y or absent	SEQ ID NO: 272 Xn1Xn2Xn3Xn4SLLY Xn5Xn6GKTYXn7Xn8 wherein Xn1 = R or absent, Xn2 = S or absent, Xn3 = S or absent, Xn4 = K or Q, Xn5 = S or K, Xn6 = N or D, Xn7 = L or absent, Xn8 = N or absent	SEQ ID NO: 273 LXn1SXn2Xn3Xn4X n5 wherein Xn1 = V or M, Xn2 = T or absent, Xn3 = H or absent, Xn4 = A or absent, Xn5 = S or absent	SEQ ID NO: 274 Xn1QXn2Xn3Xn4X n5PXn6T wherein Xn1 = V, Q or absent, Xn2 = G or L, Xn3 = T or V, Xn4 = H or D, Xn5 = F or Y, Xn6 = Q or L

FIG. 35

bin	ab name	VH CDR1	VH CDR2	VH CDR3	VL CDR1	VL CDR2	VL CDR3
2	13H12.2F8	GYTFTTY	GYTFTTY	AVPYEYDGAY	QSLFHSDDGKTY	LVS	WQGTFFPLT
2	14H10.2C9	GYTFTTY	INTYSGVP	STPYEYDGAY	QSLFDSDDGKTY	LVS	WQGTFFPLT
2	19D9.2E5	GYTFTTY	INTYSGVP	ATPYEYDGAY	QSLHSDGKTY	LVS	WQGTFFPLT
2	alignment	*****	*****	:.*****	***:.*****	***	*****
		SEQ ID NO: 275 GYTFTTY	SEQ ID NO: 276 GYTFTTY	SEQ ID NO: 277 Xn1Xn2PYEYDGAY wherein Xn1 = A or S, Xn2 = V or T	SEQ ID NO: 278 QSLXn1Xn2SDGKTY wherein Xn1 = L or F, Xn2 = D or H	SEQ ID NO: 279 LVS	SEQ ID NO: 280 WQGTFFPLT

bin	ab name	VH CDR1	VH CDR2	VH CDR3	VL CDR1	VL CDR2	VL CDR3
3	2D10.2B 2	GYTFTDY	IYPGSNDT	ANYFGSGWFFDV	KSLHSDGITY	RMS	AQMIEFFPLT
3	4A11.2B 5	GYSFTNY	IYPGSNT	STAPGGFDV	KSLHSDGITY	RMS	AQMIEFFPLT
3	846.1F5	GYTFTNY G	INTYTGE	ARWGGYDGYAMDY	QSVLYSSNQKNY	WAS	HQYLSSLT

FIG. 35 cont.

	SEQ ID NO: 281	SEQ ID NO: 282	SEQ ID NO: 283	SEQ ID NO: 284	SEQ ID NO: 285	SEQ ID NO: 286
	wherein Xn1 = S or T, Xn2 = D or N, Xn3 = G or absent	wherein Xn1 = I or absent, Xn2 = N or absent, Xn3 = I or T, Xn4 = P or T, Xn5 = S or E, Xn6 = N, G, P or absent, Xn7 = N, D or absent, Xn8 = T or absent	Xn1Xn2Xn3Xn4Xn5Xn6Xn7Xn8Xn9Xn10Xn11Xn12Xn13Xn14Xn15 wherein Xn1 = A or absent, Xn2 = R, N or absent, Xn3 = W, Y or absent, Xn4 = G, F or absent, Xn5 = G or S, Xn6 = Y, C or T, Xn7 = D, S or A, Xn8 = G or P, Xn9 = D, W or G, Xn10 = Y, F or G, Xn11 = Y or F, Xn12 = A, D or absent, Xn13 = M, V or absent, Xn14 = D or absent, Xn15 = Y or absent	Xn1Xn2Xn3LXn4Xn5SXn6Xn7Xn8Xn9Y wherein Xn1 = Q or absent, Xn2 = K or S, Xn3 = S or V, Xn4 = L or Y, Xn5 = H or S, Xn6 = D or N, Xn7 = G or Q, Xn8 = I or K, Xn9 = T or N	Xn1Xn2S wherein Xn1 = A, H or absent, Xn2 = M or Y, Xn3 = I or L, Xn4 = E or S, Xn5 = F or absent, Xn6 = P or S	Xn1QXn2Xn3Xn4Xn5Xn6LT wherein Xn1 = A, H or absent, Xn2 = M or Y, Xn3 = I or L, Xn4 = E or S, Xn5 = F or absent, Xn6 = P or S

FIG. 35 cont.

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bin	ab name	VH CDR1	VH CDR2	VH CDR3	VL CDR1	VL CDR2	VL CDR3
4	6H6.2D6	GYTF'TTY	INTYSGVP	ARGPYAMDY	QGISNY	YTS	QQYSELPYT
4	19B5.2E6	GYTF'TTY	INTYSGVP	ARGPYAMDY	QGINNY	YAS	QQYSQVPYT
4	20H5.A3	GYAF'TTY	VNTYSGVP	ARGPYAMDY	QDISNY	YTS	QQYSKLPYT
4	23H9.2E4	GYTF'TTY	INTYSGVP	ARGPYAMDY	QGINNY	YAS	QQYSQVPYT
4	alignment	**:*:*:* SEQ ID NO: 287	:***** SEQ ID NO: 288	***** SEQ ID NO: 289	*.*.* SEQ ID NO: 290	*:* SEQ ID NO: 291	*****: SEQ ID NO: 292
		GYXn1FTTY wherein Xn1 = A or T	Xn1NTYSGVP wherein Xn1 = I or V	ARGPYAMDY	QXn1IXn2NY wherein Xn1 = G or D, Xn2 = S or N	YXn1S wherein Xn1 = A or T	QQYSXn1Xn2PYT wherein Xn1 = E, Q or K, Xn2 = L or V

FIG. 35 cont.

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bin	ab name	VH CDR1	VH CDR2	VH CDR3	VL CDR1	VL CDR2	VL CDR3
5	15G7.2A7	GYTF'TDY	INPNNGGT	TSGYGFPY	QNINIW	KAS	LQGQSYPLT
5	20D11.2C6	GYTF'TDF	INPKNGGI	TSGYGFPY	QNIYIW	KAS	LQGQSYPLT
5	alignment	*****:	***:****	*****	*** **	***	*****
		SEQ ID NO: 293	SEQ ID NO: 294	SEQ ID NO: 295	SEQ ID NO: 296	SEQ ID NO: 298	
		GYTF'TDXn1	INPXn1NGGI	TSGYGFPY	QNIxnlIW	279	LQGQSYPLT
		wherein Xn1 = F or Y	wherein Xn1 = N or K		wherein Xn1 = N or Y	KAS	

bin	ab name	VH CDR1	VH CDR2	VH CDR3	VL CDR1	VL CDR2	VL CDR3
7	3B11.2G2	GYKFKTY	INTYSGVP	ARDGNYGDPMDY	QSLLYTNGKTY	LVS	LQSTHFPLT
7	13A12.2E5	GYKFKTY	INTYSGVP	ARDGNYGDPMDY	QSLLYTNGKTY	LLS	LQSTHFPLT
7	alignment	*****	*****	*****	*****	*:*	*****
		SEQ ID NO: 299	SEQ ID NO: 300	SEQ ID NO: 301	SEQ ID NO: 302	SEQ ID NO: 303	SEQ ID NO: 304

FIG. 35 cont.

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Antibody	Human Gal3 KD (M)
F846C.1B2	5.74×10^9
F846C.1F5 (846.1F5)	1.63×10^9
F846C.1H12 (846.1H12)	6.22×10^{10}
F846C.1H5 (846.1H5)	3.41×10^9
F846C.2H3 (846.2H3)	1.72×10^9
F846TC.14A2 (846T.14A2)	3.26×10^9
F846TC.14E4 (846T.14E4)	5.56×10^{10}
F846TC.16B5 (846T.16B5)	9.27×10^{10}
F846TC.7F10 (846T.7F10)	1.40×10^9
F847C.10B9 (847.10B9)	1.36×10^5
F847C.11B1 (847.11B1)	4.29×10^9
F847C.12F12 (847.12F12)	1.92×10^8
F847C.26F5 (847.26F5)	2.09×10^8
F847C.4B10 (847.4B10)	2.15×10^8
F849C.8D10 (849.8D10)	3.75×10^9
F849C.8H3	n/a
F847.14H4 (847.14H4)	1.77×10^8

FIG. 36

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Antibody	SEQ ID NO:	V _H nucleic acid sequence
TB001 (IMT001-4)	260	CAGGTGCAGCTGGTGCAGTCCGGCTCCGAGCTGAAAAACCCGGCGCCTCCGT GAAAGTGTCTGCAAAGCCTCCGGCTACACATTCACAACTACGGCATGAACTG GGTGAGGCAGGCCCCCGGCCAGGGCTGAAATGGATGGGCTGGATCAACACAA ACACAGGCGAGCCACATACGTGGAGGAGTTCACAGGCAGGTTCGTGTTCTCCC TGGAGACATCCGTGTCCACAGCCTACCTGCAGATCTCCTCCCTGAAAGCCGAGG ACACAGCCGTGTACTTCTGCGCCCCCTACGACAACCTCTTCGCCTACTGGGGCC AGGGCACAAACAGTGACAGTGTCTCTC
TB006 (4A11.H3L1)	261	CAGATTCAATTGGTTCAGAGCGGCTCAGAACTGAAAAAGCCTGGAGCCAGCGT TAAAGTGAGCTGTAAAGCCAGTGGATACACATTCACCACTTACGTCATGTCTG GGTTAGACAGGCCCCCTGGACAGGGGCTGGAATGGATGGGCTGGATAAACACTC ACTCTGGAGTGCCACATACGCCGACGACTTTACAGGCAGGTTTCGTGTTTCCC TAGATACTAGTGTGAATACTGCATACTTGCAAACTCTTCTCTGAAAGCAGAGG ATACCGCCGTGTACTTTTGACCCGCGATGGGAATGATGGGGATGCCATGGACA ACTGGGGCCAGGGGACGACTGTGACAGTGTCTTCA
12G5.D7	262	CAGGTGCAGCTGAAGCAGTCTGGGGCTGAGCTGGTGAGGCCTGGGGCTTCAGT GAAGCTGTCTGCAAGGCTTCTGGCTACACTTTCAGTACTATATAAACTG GGTGAAAGCAGAGGCCTGGACAGGGACTTGAGTGGATTGCAAGGATTTATCCTG GAACTGGTAATACTGACTACAATGAGAAGTTCAAGGGCAGGGCCACACTGACT GCAGAAAACCTCTCCAGCACTGCCTACATGCAGCTCAGCAGTCTGACATCTGAG GACTCTGCTGTCTATTTCTGTGCAAGATTTGCGTATTACTACGGTAGTGGAGGGT ACTTTGACTACTGGGGCCACGGCACCCTCTCACAGTCTCTCTCA
13A12.2E5	263	CAGATCCAGTTGGTACAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGACTTCTGGGTATAAATTCAAAACCTATGTGATGAGCTG GGTGAAACAGGCTCCAGGAAAGGCTTTAAAGTGGATGGGCTGGATAAACACCT ACTCTGGAGTGCCAACATATGCTGATGACTTCAAGGGACGATTTGCCTTCTCTTT GGAAACCTCTGCCAGCACTGCCTATTTGGAGATCATCAACCTCAAAAATGAGGA CACGGCTACATATTTCTGTGCAAGAGATGGTAACTACGGGGATCCTATGGACTA CTGGGGTCAAGGAACCTCAGTCACCGTCTCTCTCA
14H10.2C9 (14H10)	264	CAGATCCAGTTGGTACAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGGTATAACCTTCACAACTATGGAATGGGCTG GGTGAAACAGGCTCCAGGAAAGGATTTAAAGTGGATGGGCTGGATAAACACCT ACTCTGGAGTGCCAACATATGCTGATGACTTCAAGGGACGTTTGCCTTCTCTTT GGAAACCTCTGCCAGCACTGCCTATTTGCAGATCAGCAACCTCAAAAATGAAG ACACGGCTACATATTTCTGTTCAACCCCTTATGAATACGACGGGGCTTACTGGG GCCAGGGGACTCTGGTCACTGTCTCTGCA
15F10.2D6 (15F10)	265	GAAGTACAGCTGGTGGAGTCTGGGGGAGGCTTAGTGAAGCCTGGAGGGTCCCT GAAACTCTCCTGTGCAGCCTCTGGATTTCGCTTTCAGTTTCTATGCCATGTCTTGG GTTTCGCCAGACTCCGGAAGAGAGGCTGGAGTGGGTCGCAACCATTAGTGATGG TGGTGTTTACACCTACTATACAGACCATGTAAAGGGCCGATTACCATCTCCAG AGACAATGCCGAGGACAACCTGTACCTGCAAAATGAGCCATCTGAAGTCTGAGG ACACAGCCATGTATTATTGTGTGAGAGATGGGGGCTACTGGGGCCAAGGCACC ACTCTCACAGTCTCTCTCA
19B5.2E6 (19B5)	266	CAGATCCAACCTGTTCAGAGCGGGCTGAATTGAAGAAACCAGGCGAGACTGT AAAGATCTCCTGTAAAGCCAGTGGCTATACATTCACCACCTACGCAATGAGCTG GGTCAAGCAGGCACCCGAAAGGGTCTGAAGTGGATGGGTTGGATAAATACAT ACTCAGGCGTCCCAACCTACGCTGATGATTGGAAGGGGCGCTTTGCCTTTTCTCT TGAAACCTCAGCATCAACCGCCTACTTGCAGATAAATAACCTCAAAAATGAAG ACACCGCTACCTATTTCTGCGCAAGGGGGCTTATGCTATGGACTACTGGGGCC AGGGCACCTCTGTGACTGTAAGTTCT

FIG. 37

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Antibody	SEQ ID NO:	V _H nucleic acid sequence
20D11.2C6 (20D11)	267	GAGGTCCAGCTGCAACAATCTGGACCTGAACTGGTGAAGCCTGGGGCTTCAGT GAAGATATCCTGTAAGGCTTCTGGATACACGTTCACTGACTTCTACATAAACTG GGTGAAGCAGAGCCATGGAAAGAGCCTTGAGTGGATTGGAGATATTAATCCTA AGAAATGGTGGTATTAACTACAACCCGAAGTTCAAGATCAAGGCCACATTGACT GTAGACAAGTCCTCCAGCACATCCTACATGGACCTCCGCGGCCTGACATCTGAG GACTCTGCAGTCTATTACTGCACCTCAGGCTACGGATTTCTTACTGGGGCCAA GGGACTCTGGTCACTGTCTCTGCA
20H5.A3 (20H5)	268	CAGATCCAGTTGGTACAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGTCAGT CAAGATCTCCTGCAAGGCTTCTGGTTATGCCTTCACAACCTATGGAATGAGCTG GGTGCAACAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGGTAAACACCT ACTCTGGAGTGCCAACATGTGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTTT GGAAACCTCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAGAAATGAGG ACACGGCTACATATTTCTGTGCAAGAGGGCCCTATGCTATGGACTACTGGGGTC AAGGAACCTCAGTCACCGTCTCCTCA
23H9.2E4 (23H9)	269	CAGATCCAGTTGGTACAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACCTATGCAATGAGCTG GGTGAAACAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCT ACTCTGGAGTGCCAACATATGCTGATGACCTCAAGGGACGGTTTGCCTTCTCTT TGGAAACCTCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGG ACACGGCTACATATTTCTGTGCAAGAGGGCCCTATGCTATGGACTACTGGGGTC AAGGAACCTCAGTCACCGTCTCCTCA
2D10.2B2 (2D10)	270	CAAGTACAGCTCCAGCAATCAGGACCTGAACTTGTTAAGCCAGGTGCAAGCGT CAAAATAAGTTGTAAAGCATCAGGTTACACCTTTACAGACTACTATATCAACTG GGTCAAGCAACGGCCTGGTCAGGGACTTGAATGGATAGGTTGGATCTACCCTG GGTCACAAGACACCAAGTACAATGAAAAATTTAAGGGGAAAGCCACTCTGACA GTAGATACTAGCTCAAGTACCGCTACATGCAGCTCGGCAGCCTCACTTCCGAG GACTCTGCCGTATATTTCTGTGCCAACTACTTCGGGTCTTCTGGGTGGTTCTTTG ATGTGTGGGGAACCGGCACCACCGTAACCGTTTCTCTCA
3B11.2G2 (3B11)	271	CAGATCCAGTTGGTACAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGGTATAAATTCAAAACCTATGTAATGAGCTG GGTGAAACAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCT ACTCTGGAGTGCCAACATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTTT GGAAACCTCTGCCAGCACTGCCTATTTGGAGATCATCAACCTCAAAAATGAGGA CACGGCTACATATTTCTGTGCAAGAGATGGTAATTACGGGGATCCTATGGACTA CTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
7D8.2D8 (7D8)	272	GAAGTGCAGCTGGTGGAGTCTGGGGGAGGCTTAGTGAAGCCTGGAGGGTCCCT GAAACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTAGCTATGCCATGTCTTGG GTTTCGCCAGACTCCGGAAAAGAGGCTGGAGTGGGTGCGAACCATCAGTGATGG TGGTATTTACACCTACTATCCAGACAATGTAAAGGGCCGATTACCATTTCCAG AGACAATGCCAAGAACAACCTGTTCTTGCAATGAGCCATCTGAAGTCTGAGG ATACAGCCATGTATTACTGTGTAAGAGATGGGGGCTACTGGGGCCAAGGCACC ACTCTCACAGTCTCCTCA
F846C.1B2	273	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACTATGGAATGAATTG GGTGAAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCT ACACTGGAGAGCCATCATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTT TGGAAACCTCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGG ACATGGCTACATATTTCTGTGCAAGATGGGGGGGTTACGCTGGGGATTACTATG CTATGGACTTCTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA

FIG. 37 cont.

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Antibody	SEQ ID NO:	V _H nucleic acid sequence
F846C.1F5 (846.1F5)	274	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACTATGGAATGAACTG GGTGAAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCT ACACTGGAGAGCCATCATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTT TGGAAACCTCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGG ACATGGCTACATATTTCTGTGCAAGATGGGGGGGTACGATGGGGATTACTATG CTATGGACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
F846C.1H12 (846.1H12)	275	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACTTTGGAATGAACTG GGTGAAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCT ACACTGGAGAGCCATCATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTT TGGAAACCTCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGG ACATTGCTACATATTTCTGTGCAAGATGGGGGGGTACGCTGGGGATTACTATG CTATGGACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
F846C.1H5 (846.1H5)	276	GAGGTCCAGCTGTTGGAGTCTGGGGGAGGCTTAGTGAAGCCTGGAGGGTCCCT GAAACTCTCCTGTGCAGCCTCTGGATTACCTTCAGCAGCTATGCCATGTCTTGG GTTCCGCCAGACTCCAGAGAAGAGGCTGGAGTGGGTTCGCATCCATTAGTAGTGG TGGTGACACCTACTATCCAGACAGTGTGAAGGGCCGATTACCATCTCTAGAGA TAATGCCAGGAACATCCTGTACCTGCAAATGAGCAGTCTGAGGTCTGAGGACA CGCCCATGTATTACTGTGCAAGTTATGGTAACTCCCTCTTTGACTACTGGGGCC AAGGCACCACTCTCACAGTCTCCTCA
F846C.2H3 (846.2H3)	277	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACTATGGAATGAACTG GGTGAAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCT ACACTGGAGAGCCATCATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTT TGGAAACCTCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGG ACATGGCTACATATTTCTGTGCAAGATGGGGGGGTACGATGGGGATTACTATG CTATGGACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
F846TC.14A2 (846T.14A2)	278	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACTATGGAATGAACTG GGTGAAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCT ACACTGGAGAGCCAACATATGCTGGTGACCTCAAGGGACGGTTTGCCTTCTCTT TGGAAACCTCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGG ACACGGCTACATATTTCTGTGTAAGATATACTATGGACTACTGGGGTCAAGGAA CCTCAGTCACCGTCTCCTCA
F846TC.14E4 (846T.14E4)	279	CAGGTACTCTGAAAGAGTCTGGCCCTGGGATATTGCAGCCCTCCCAGACCCTC AGTCTGACTTGTCTTTCTCTGGGTTTTCACTGAGCACTTCTGGTATGGGTGTAG GCTGGATTTCGTCAGCCTTCAGGGAAGGGTCTGGAGTGGCTGGCACACATTTGGT GGGATGATGATAAGTACTATAACACAGCCCTGAAGAGCGGGCTCACAACTCC AAGGATGCCTCCAAAAACCAGGTCTTCCTCAAGATCGCCAGTATGGACACTGCA GATACTGCCACATACTACTGTGCTCGAAACCTCTATGATGGTTCTACGGGTAC TATGCTATGGACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
F846TC.16B5 (846T.16B5)	280	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACTATGGAATGAACTG GGTGAAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCT ACACTGGAGAGCCAGCATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTT TGGAAACCTCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGG ACATGGCTACATATTTCTGTGCAAGATGGGGGGGTACGATGGGGATTACTATG CTATGGACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA

FIG. 37 cont.

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Antibody	SEQ ID NO:	V _H nucleic acid sequence
F846TC.7F10 (846T.7F10)	281	GAAGTGCAGCTGGTGGAGTCTGGGGGAGACTTAGTGAAGCCTGGAGGGTCCCT GAAACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTAACTATGGCTTGTCTTGG ATTGCGCCAGACTCCAGACAAGAGGCTGGAGTGGGTGCGAACCATTAGTAGTGG TGGTAGTTACACCTACTATCCTGACAGTGTGAAGGGGCGATTACCATCTCCAG AGACAGTGCCAAGAACACCCTGTACCTGCAAATGAGCAGTCTGAAGTCTGAGG ACACAGCCATGTATTACTGTGCAAGACATGCGCATTACTACGGTGTAGCCCCGT ACTACTTTGACTACTGGGGCCAAGGCACCTGTCTCACAGTCTCCTCA
F847C.10B9 (847.10B9)	282	CAGATCCAGTTGGTGCAGTCTGGACCTGAGGTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGGTATATCTTCACAACTATGGAATGAACTG GGTGAAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCT ACACTGGAGAGCCAACATATACTGATGACTTCAAGGGACGGTTTGCCTTCTCTT TGGAAACCTCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGG ACACGGCTACATATTTCTGTGCAAGTTTGGTAACTACGTGGGAGCTATGGACT ACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
F847C.11B1 (847.11B1)	283	GAGGTCCAGCTTCAGCAGTCTGGACCTGAGCTGGTGAACCTGGGGCCTCAGTG AAGATATCCTGCAAGGCTTCTGGAAACACATTCACTGACCACAACATGCAGTGG GTGAAGCAGAGCCATGGAAAGAGCCTTGAGTGGATTGGATATATTTATCCTTAC AATGGTGGTACTGGCTACAACCAGAAGTTCAAGAGCAAGGCCACATTGACTGT AGACAATTCCTCCAGCACAGTCTACATGGAGCTCCGCAGCCTGACATCTGAGGA CTCTGCAGTCTATTACTGTGCAAGAGGGGAGTATGATTACCTGGCCTGGTTTGC TTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA
F847C.12F12 (847.12F12)	284	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGGTATATCTTCACAACTATGGAATGAACTG GGTGAAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCT ACACTGGAGAGCCAACATATGTTGATGACTTCAAGGGACGGTTTGCCTTCTCTT TGGAAACCTCTGCCAGCACTGCCTATTTGCGGATCAACAACCTCAAAAATGAGG ACACGGCTACATATTTCTGTGCAAGTTTGGTAACTACGTGGGAGCTATGGACT ACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
F847C.26F5 (847.26F5)	285	CAGATCCAGTTGGTGCAGTCTGGACCTGAGGTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGGTATATCTTCACAACTATGGAATGAACTG GGTGAAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCT ACACTGGAGAGCCAACATATACTGATGACTTCAAGGGACGGTTTGCCTTCTCTT TGGAAACCTCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGG ACACGGCTACATATTTCTGTGCAAGTTTGGTAACTACGTGGGAGCTATGGACT ACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
F847C.4B10 (847.4B10)	286	GAGGTGCAGCTTGTGAGACTGGGGGAGGCTTAGTGAAGCCTGGAGGGTCCCT GAAACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTAGCTATGCCATGTCTTGG GTTGCGCCAGACTCCAGAGAAGAGGCTGGAGTGGGTGCGATCCATTAGTAGTGG TGGTAGCACCTACTATCCAGACAGTGTGAAGGGCCGATTACCATCTCCAGAGA TAATGCCAGGAACATCCTGTACCTGCAAAATGAGCAGTCTGAGGTCTGAGGACA CGGCCATGTATTACTGTACAAGGTTTACTACGGTAGTAGAGATGGACTACTGGG GTCAAGGAACCTCAGTCACCGTCTCCTCA
F849C.8D10 (849.8D10)	287	CAGGTCCAAGTGCAGCAGACTGGTGCTGAGCTTGTGAAGCCTGGGGCCTCAGTG AAGCTGTCCTGCAAGGCTTCTGGCTATACTTTCACCAGCTACTGGATAAACTGG GTGAAGCAGAGGCTGGACAAGGCCTTGAGTGGATTGGAAACATTTATCCTGG TAGTAGTAGTATTTACTACAGTGAGAAGTTCAAGAGTAAGGCCACACTGACTGT AGACACATCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACATCTGACGA CTCTGCGGTCTATTATTGTGCAAGATGGGGCTACTGGGGCCAAGGCACCACTCT CACAGTCTCCTCA

FIG. 37 cont.

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Antibody	SEQ ID NO:	V _H nucleic acid sequence
F849C.8H3	288	CAGGTACTCTGAAAGAGTCTGGCCCTGGGATATTGCAGCCCTCCCAGACCCTCAGTCTGACTTGTCTTTCTCTGGGTTTTCAGTCTGAGCACTTTTGGTATGGGTGTAGGCTGGATTTCGTCAGCCTTCAGGGAAGGGTCTGGAGTGGCTGGCACACATTTGGTGGGATGATGATAAACACTATAACCCAGCCCTGAAGAGCCGGCTCACAATCTCCAAGGATACCTCCAAAAACCAGGTCTTCCTCAGGATCGCCAATGTGGACACTGCAATAATGCCACATATTACTGTGCTCGAATCGACTATGGTGAAGTACGTCGGGTTTGCTTATTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA
846.2B11	500	CAGGTCCAGCTACAGCAGTCTGGACCTGAGCTGGTGAGGCCTGGGGCTTTAGTGAAAGTTTCTGCAAGGCTTCTGGTTACACCTTCACAAGCTACGATATAAACTGGGTGAAGCAGAGGCCTGGACAGGGACTTGAGTGGATTGGATGGATTATCCTGGAGATGGTAGTACTAAATATAATGAGAAATCAAGGGCAAGGCCACACTGACTGCAGACAAATCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACTTCTGAGAACTCTGCAGTCTATTTCTGTGCAAGAGAGGGCGCTTCTAATGCTATGGACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
846.4D5	501	GAAGTGAAGCTTGAGGAGTCTGGAGGAGGCTTGGTGCAACCTGGAGGATCCATGAAACTCTCCTGTGTGCTCTGGATTCACTTTCAGTAAGTCTGGATGAACTGGGTCCGCCAGTCTCCAGAGAAAGGGGCTTGAGTGGGTTGCTGAAATTAGATTGAAATCTAATAATTATGCAACACATTATGCGGAGTCTGTGAAAGGGAGGTTCAACCATCTCAAGAGATGATTCCAAAAGTAGTGTCTACCTGCAAATGAACAACCTTAAGAGCTGAAGACACTGGCATTTTATTACTGTACCAGGCACTACGGCTTTCCTACTGGTACTTCGATGTCTGGGGCGCAGGGACCACGGTCACCGTCTCCTCA
847.14H4	502	CAGATCCAGTTGGTGCACTCTGGACCTGAACTGACGAAGCCTGGAGAGACAGTCAAGATCTCCTGTAAAGGCTTCTGGCTATACCTTCACAGACTATGGAATGAACTGGTGAGGCAGGCTCCAGGAGAGACTTTAAAGTGGATGGGCTGGATAAACACCTACACTGGAGAGCCAACATATGCTGATGACTTCAAGGGGCGGTTTGCCTTCTCTTTGGAATCCTCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGGACGTGGCTACATATTTCTGTGCAAGATAACCTATGGACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
846T.1H2	503	CAGATCCAGTTGGTGCACTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCAAGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACTATGGAATGAACTGGTGAAAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCAACACTGGAGAGCCAACATATGCTGAAGAGTTCAAGGGACGGTTTGCCTTCTCTTTGGAACCTCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGGACACGGCTACATATTTCTGTGCAACCGGGGGGGTAACTGGGACTTTGACTACTGGGGCCAAGGCACCACTCTCACAGTCTCCTCA
mIMT001	504	CAGATCCAACCTGTGCACTCAGGTCCAGAATTGAAGAAGCCTGGTGAGACCGTCAAGATTTCTGTAAAGGCTCTGGTTATACTTTTACCAACTATGGCATGAATTGGGTCAAGCAGGCACCTGGGAAGGGTTTGAAATGGATGGGGTGGATAAAATACCAACACAGGGGAACCAACTTACGTTGAAGAGTTTAAGGGTCGTTTTGCATTCACTCTTGAGACTTCTGCAAGCACAGCTTACCTCCAAATTAACAATCTCAAAAATGAAGATACTGCTACATATTTCTGTGCTCCTTATGATAATTTTTCGCCTACTGGGGACAGGGAACCTCTGGTCACCGTCTCAGCA
4A11.2B5	505	CAGGTACAACTTCAGCAGAGCGGTCCAGAACTTGTGAAGCCCGGTGCTAGTGTCAAAATATCTTGCAAAGCAAGTGGTTATTCCTTCACCAACTATTACATACACTGGGTAAAACAACGTCCAGGGCAAGGACTCGAATGGATTGGTTGGATCTACCCCGGCAGCGGCAACACTAACTACAACGAGAAGTTTAAAGGCAAGCTACTCTCACAGCAGACACTTCTAGCAGTACAACAAATATGCAGTTGTCCTCTCTGACTTCCGAAGACAGCGCCGTCTATTACTGTTCTACTGCACCCGGAGGTTTGACGTCTGGGGTTCGGCACCAAGTTACCGTTAGTTCC

FIG. 37 cont.

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Antibody	SEQ ID NO:	V _H nucleic acid sequence
4A11.H1L1	506	CAGGTGCAGCTGGTGCAATCAGGAGCCGAAGTTAAGAAGCCTGGCGCCAGCGT CAAGGTCTCATGTAAAGCCTCCGGTTACAGTTTCACCAACTACTATATGCACTG GGTTAGGCAAGCACCAGGCCAGGGCTTGAGTGGATGGGATGGATTTATCCAG GGAGCGGTAACACCAATTACAATGAGAAGTTTCAAGGGCGCGTAACCATGACA GCAGATACCAGTATAAGCACC GCCTATATGGA ACTCTCTCGGTTGAGATCCGAT GATACCGCTGTTTATTACTGCTCTACCGCACCTGGTGGTTTCGACGTTTGGGGCC AAGGTACTACAGTGACCGTATCATCA
4A11.H4L2	507	CAGGTGCAACTGGTCCAGTCTGGGGCGGAGGTCAAAAAGCCTGGAGCCTCCGT CAAAGTGTCATGTAAAGCCTCAGGGTATAGTTTCACCAACTACTATATACATTG GGTCAGACAAGCCCCAGGCCAGCGTCTTGAGTGGATGGGATGGATTTATCCCG GATCAGGGAATACAACTATAACGAGAAATTTCAAGGCAGAGTTACTCTCACT GCCGATACCTCTGCAAGTACTACCTATATGGAGCTCTCCAGTCTCAGAAGCGAA GACACAGCAGTATATTACTGTAGCACCGCCCCAGGCGGGTTTGACGTGTGGGGC CAAGGCACTACTGTAAACCGTTAGCTCA
4G2.2G6	508	CAAATACAGCTCGTGCACTCTGGTCCCGATTGGAAGAAGCCTGGAGAAACCGT AAAGATAAGCTGTAAAGGCTAGTGGTTACACTTTCACAACATACGTTATGTCATG GGTTAAACAGGCTCCTGGAAAAGACCTTAAATGGATGGGATGGATTAACACCC ATAGCGGTGTCCCAACTTACGCTGACGATTTTAAAGGGACGATTTGACTTTTCTCT CGAAACTTCTGCCAACACAGCTTTTTTGCAGATCAACAATCTCAAGAATGAAGA CACCGCAACCTATTTCTGCACTCGAGATGGGAACGACGGGGATGCAATGGATA ACTGGGGACAAGGCACATCAGTTACCGTGAGCTCT
6B3.2D3	509	CAGGTGCAGCTGAAGCAGTCAGGACCTGGCCTAGTGCAGCCCTCACAGAGCCT GTCCATCACCTGCACAGTCTCTGGTTTCTCATTAACTAGTTATGGTGTACACTGG GTTCCGCCAGCCTCCAGGAAAGGGTCTGGAGTGGCTGGGAGTGATATGGAGTGG TGGAAGCACAGACTATAATGCTGCTTTCATATCCAGACTGAGCATCAGTAAGGA CAACTCCAAGAGCCAAGTTTTCTTTAAATGAACAGTCTGCAAGCTGATGACAC TGCCATATACTACTGTGCCAAAGGGCCTTATGATTACGACTTAGGCTGGTTTGC TTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA
6H6.2D6	510	CAGATCCAGCTGGTGCAGTCCCGCCCCGAGCTGAAGAAGCCCGGCGAGACTGT GAAGATCTCCTGCAAGGCCTCCGGCTACACCTTCACCACCTACGGCATGTCTCTG GGTGAAGCAGGCCCCCCGGCAAGGGCCTGAAGTGGATGGCTGGATCAACACCT ACTCCGGCGTGCCACCTACGCCGACGACTTCAAGGGCAGGTTGCGCTTCTCCC TGGAGACTTCCGCCTCCACCGCTACCTGCAGATCAACAACCTGACCAACGAGG ACACCGCCACCTACTTCTGCGCCAGGGGGCCCTACGCCATGGACTACTGGGGCC AGGGCACCTCCGTGACCGTGTCTCTCC
9H2.2H10	511	CAGGTCCAGCTGCAGCAGCCTGGGGCTGAACTGGTGGGGCCTGGGTCTTCAGTG AAGCTGTCTTGCAAGGCTTCTGGCTACACCTTCACCAACTACTGGATACATTGG GTGAAGCAGAGGCCTCTACAAGGCCTTGAATGGATTGGTAACATTGACCCTTCT GATAGTGAAACTCACTACAATCAAAAGTTCAAGGACAAGGCCACATTGACTGT AGACAAATCCTCCAGCACAGCCTACATGCAACTCAGCAGCCTGACATCTGAGG ACTCTGCGGTCTATTACTGTGCAAGACATGGTTACTACGACTACTGGGGCCAAG GCACCACTCTCACAGTCTCTCTCA
13G4.2F8	512	CAGGTCCAGCTGCAGCAGCCTGGGGCTGAGCTGGTAAAGCCTGGGGCTTCAGT GAAGTTGTCTTGCAAGGCTTCTGGCTACACTTTCACCAGCTACTGGATGCACTG GGTGAAGCAGAGGCCTGGACAAGGCCTTGAGTGGATTGGAATGATTCATCCTA ACAGTGGTAGTACTGACTACAATGAGAAGTTCAAGAACAAGGCCACACTGAAT GTAGACAAATCCTCCAGTACAGCCTACATACA ACTCAGCAGCCTGACATCTGAG GACTCTGCGGTCTATTACTGTACAAGATGGGGGATTATTACTACGCGAGGGGAC TACTGGGGCCAAGGCACCACTCTCACAGTCTCTCTCA

FIG. 37 cont.

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Antibody	SEQ ID NO:	V _H nucleic acid sequence
13H12.2F8	513	CAGATCCAGCTGGTCCAATCAGGACCCGAACTGAAAAAACAGGCGAGACAGT CAAAATCAGCTGTAAGGCCTCAGGCTACACTTTCACAACCTACGGGATGTCATG GGTAAAGCAAGCTCCTGGCAAGGGGCTGAAATGGATGGGTTGGATCAACACAT ACTCTGGAGTGCCACCTACGCTGACGACTTTAAGGGTAGATTTCGCATTTAGCC TGGAAACAAGTGCCAGTACAGCCTACCTCCAGATAAACAACCTGAAAAACGAG GATACCGCAACCTATTTTTCGCCCGTCCCCTACGAGTACGACGGTGCCTATTGG GGTCAGGGTACACTCGTAACAGTTTCCGCC
15G7.2A7	514	GAGGTCCAGCTGCAACAATCTGGACCTGAGCTGGTGAAGCCTGGGGCTTCAGT GAAGATATCCTGTAAGGCTTCTGGATACACGTTCACTGACTACTACATGAACTG GGTGAAGCAGAGCCATGGAAAGAGCCTTGAGTGGATTGGAGATATTAATCCTA ACAATGGTGGTACTAACTACAACCAGAAGTTCAAGGGCAAGGCCACATTGACT GTAGACAAGTCCTCCAGCACAGCCTACATGGAGCTCCGCAGCCTGACATCTGAG GACTCTGCAGTCTATTACTGCACCTCAGGCTACGGGTTTCCTTACTGGGGCCAG GGGACTCTGGTCACTGTCTCTGCA
19D9.2E5	515	CAGATCCAGTTGGTACAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGATATACCTTCACAACCTATGGAATGGGCTG GGTGAACAGGCTCCAGGAAAGGGTTTGAAGTGGATGGGCTGGATAAACACCT ACTCTGGCGTGCCAACATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTTT GGAAACCTCTACCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGG ACATGGCTACATATTTCTGTGCAACCCCTTATGAATACGACGGGGCTTACTGGG GCCAAGGGACTCTGGTCACTGTCTCTGCA
23B10.2B12	516	CAGGTCCAGCTGCAGCAGTCTGGACCTGAACTGGTGAAGCCTGGGGATTCTGTG AAGATATCCTGCAAGGCTGCTGGCTACACCTTCAGTGACTATTATATAAACTGG GTGAAGCAGAGGCCTGGACAGGGACTTGAGTGGATTGGATGGATTTATCCTGT AAGCGTTAATACTAAGTACAATGAGAAGTTCAAGGGCAAGGCCACATTGACTG TAGACACATCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACCTCTGAGG ACTCTGGGGTCTATTTCTGTGCCTACCTTGATTATTGGGGCCAAGGGACTCTGGT CACTGTCTCTGCA
24D12.2H9	517	CAGGTGCAGCTGAAGCAGTCAGGACCTGGCCTAGTGCAGCCCTCACAGAGCCT GTCCATCACCTGCACAGTCTCTGGTTTCTCATTAAGCTATGGTGTACACTGG GTTCGCCAGGCTCCAGGAAAGGGTCTGGAATGGCTGGGAGTGATATGGAGTGG TGGAAGCACAGACTATAATGCTGCTTTCATGTCCAGACTGAGCATCAGCAAGGA CAACTCCAAGAGCCAAGTTTCTTTTAAAATGAACAGTCTGCAAGCTGATGACAC TGCCATATACTACTGTGCCAAAAGCCCTGATGGTTACGACGTCGCCTGGTTTGG TACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA

FIG. 37 cont.

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Antibody	SEQ ID NO:	V _H nucleic acid sequence
846.2D4	812	GAAGTGAAGCTTGAGGAGTCTGGAGGAGGCTTGGTGCAACCTGGAGGATCCAT GAAACTCTCCTGTGTTGCCTCTGGATTCACTTTCAGTAACTACTGGATGAACTGG GTCCGCCAGTCTCCAGAGAAGGGGCTTGAGTGGGTTGCTGAACTTAGATTGAAA TCTAATAATTATGCAACACATTATGCGGAGTCTGTGAAAGGGAGGTTACCATC TCAAGAGATGATTCCAAAAGTAGTGTCTACCTGCAAATGAACAACCTAAGAGCT GAAGACACTGGCATTATTACTGTACCAGGCACTACGGCTTTCCTACTGGTAC TTCGATGTCTGGGGCGCAGGGACCACGGTCACCGTCTCCTCA
846.2F11	813	GAGGTCCAGCTGCAGCAGTCTGGACCTGAGCTGGTGAAGCCTGGGGCTTCAGT GAAGATGTCCTGCAAGGCTTCTGGATACACATTCAGTATGTTATGCACTG GGTGAAGCAGAAGCCTGGGCAGGGCCTTGAGTGGATTGGATATATTAATCCTTA CAATGATGGTACTAAGTACAATGAGAAGTTCAAAGGCAAGGCCACACTGACTT CAGACAAATCCTCCAGCACAGCCTACATGGAGCTCAGCAGCCTGACCTCTGAG GACTCTGCGGTCTATTACTGTGCAAGATTACTTTTTACTATGCTATGGACTACT GGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
846T.10B1	814	CAGGTTTCAGCTGCAGCAGTCTGGACCTGAGCTGGTGAAGCCTGGGGCTTTAGTG AAGATTTCTGCAAGGCTTCTGGTTACACCTTCACAAGCTACGATATAAACTGG GTGAAGCAGAGGCCTGGACAGGGACTTGAGTGGATTGGATGGATTTATCCTGG AGATGGTAGTACTAAATACAATGAGAAATTCAAGGGCAAGGCCACACTGACTG CAGACAAATCCTCCAGCACAGTTTACATGCAGCTCAGCAGCCTGACTTCTGAGA ACTCTGCAGTCTATTTCTGTGCTAGAGAGGCGGCTTCTAATGCCATGGACTACT GGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
846T.2E3	815	CAGGTCCAGCTGCAGCAGTCTGGACCTGAGCTGGTGAAGCCTGGGGCTTTAGTG AAGATATCCTGCAAGGCTTCTGGTTACACCTTCACAAGCTACGATATAAACTGG GTGAAGCAGAGGCCTGGACAGGGACTTGAGTGGATTGGATGGATTTATCCTGG AGATGGTAGTACTAAGTACAATGAGAAATTCAAGGGCAAGGCCGCACTGACTG CAGACAAGTCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACTTCTGAGA ACTCTGCAGTCTATTTCTGTGCAAGAGAGGCGGCTTCTAATGCTATGGACTACT GGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
846T.4C9	816	GAGGTCCAGCTGCAGCAGTCTGGACCTGAGCTGGTAAAGCCTGGGGCTTCAGT GAAGATGTCCTGCAAGGCTTCTGGATACTCATTCACTAATATATTATGCACTG GGTGAAGCAGAAGCCTGGGCAGGGCCTTGAGTGGATTGGATATATTAATCCTTA CAATGATGGTACTAAGTACAATGAGAAGTTCAAAGGCAAGGCCACACTGACTT CAGACAAATCCTCCAGCACAGCCTACATGGAGCTCAGCAGCCTGACCTCTGAG GACTCTGCGGTCTATTACTGTGCAAGATTACTTTTTACTATGCTATGGACTACT GGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
846T.4E11	817	CAGGTTTCAGCTGCAGCAGTCTGGAGCTGAACTGGTAAAGCCTGGGGCTTCAGTG AAGTTGTCCTGCAAGGCTTCTGGCTACACCTTCAGAAGCTATGATATAAACTGG GTGAGGCAGAGGCCTGAACAGGGACTTGAGTGGATTGGATGGATTTTCTGG AGAAGGTATTTCTAAGTACAATGAGAAGTTCAAAGGGCAAGGCCACACTGACTA CAGACAAATTTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACATCTGAG GACTCTGCTGTCTATTTCTGTGCAAGAGAGGCTACGGCTGGGGCTATGGACTAC TGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
846T.4F5	818	GAGGTGAAGCTTCTCGAGTCTGGAGGAGGCTTGGTGCAACCTGGAGGATCCAT GAAACTCTCCTGTGTTGCCTCTGGATTCACTTTCAGTAACTTCTGGATGAACTGG GTCCGCCAGTCTCCAGAGAAGGGGCTTGAGTGGGTTGCTGAAATTAGATTGAA ATCTAATAATTATGCAACACATTATGCGGAGTCTGTGAAAGGGAGGTTACCAT CTCAAGAGATGATTCCAAAAGTAGTGTCTACCTGCAAATGAACAACCTAAGAG CTGAAGACACTGGCATTATTACTGTACCAGGCACTACGGCTTTCCTACTGGT ACTTCGATGTCTGGGGCGCAGGGACCACGGTCACCGTCTCCTCA

FIG. 37 cont.

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Antibody	SEQ ID NO:	V _H nucleic acid sequence
846T.8D1	819	CAGATTTCAGTTGCAGCAGTCTGGAGCTGAACTGGTAAAGCCTGGGGCTTCAGTG AAGTTGTCCTGCAAGGCTTCTGGCTACACCTTCACAAGCTATGATATATGCTGG GTGAGGCAGAGGCCTGGACAGGGCCTTGAGTGGATTGGATGGATTTTTCCTGG AGATGGTACTACTAAGTACACTGAGAACTTCAAGGGCAAGGCCACACTGACTA CAGACAAATCCTCCAGCACAGCCTACATGCACCTCAGCAGGCTGACATCTGAG GACTCTGCTGTCTATTTCTGTGCAAGGGAGGGGGCGGGCTCCTGGTTTGCTTAC TGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA
847.10C9	820	GAGGTTTCAGCTGCAGCAGTCTGGAGCTGAGCTGGTGCGGCCTGGGACTTCAGTG AAGGTGTCCTGCAAGGCTTCGGAATACGCCTTCAATAATTACATGATGGAATGG GTAAAACAGAGGCCTGGACAGGGCCTTGAGTGGATTGGATGGATTAATCCCGG AAGTGGTGTCTACTAATTACAATGAGAAATTTCAAGGACAAGGCAACACTGACTG CAGACAAATCCTCCACCACTGCCTACATGCAGCTCAGCAGCCTGACATCTGATG ACTCTGCGGTCTATTTCTGTACCTACAATGATCTTGGTTACTGGGGCCAAGGGA CTCTGGTCACTGTCTCTGCA
847.11D6	821	GAGGTCAAGCTGCAGCAGTCTGGACCTGAGCTGATGAAGCCTGGAACCTTCAAT GAAGATATCCTGTAAAGGCTTCTGGTTACTCATTACCGGCTACACCATGAACATG GGTGAAGCAGAGCCATGGAAAGAACCTTGAGTGGATTGGACTTATTAATCCTTA CAATGGTGGTACTAATACTACAACCAGAAGTTCAGGGGCAAGGCCACATTAAGTG TAGACAAGTCATCCAACACAGCCTACATGGAGCTCCTCAGTCTGACATCTGAAG ACTCTGCAGTCTATTACTGTGCAAGAAAGGACGATTATTACGGAAGTAGTCCCT ATGCTCTGGACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
847.15D12	822	CAGGTCCAGCTGCAGCAGTCTGGAGCTGAGCTGATGAAGCCTGGGGCTCAGT GAAGATATCCTGCAAGGCTTCTGGCTACACATTCACCTAAGTACTGGATAGAGTG GGTAAAGCAGAGGCCTGGACATGGCCTTGAATGGATTGGAGAATTTTACCTGG AGATGGCAGTAGTCACTACAATGAGAAGTTCAAGGGCAAGGCCACATTCACCT CAGATACATCCTCCAACACAGCCTACATACACCTCACCAGCCTGACATCTGAGG ACTCTGCCGTCTATTACTGTGTAAGAGATGACTACGACAGTGAAGTACTGGGGCCC AAGGCACCACTCTCACAGTCTCCTCA
847.15F9	823	CAAATTGTTCTCTCCCAGTCTCCAGCAATCCTGTCTGCATCTCCAGGGGAGAAG GTCACAATGACTTGCAGGGCCAGCTCAAGTGTAACCTACATGTACTGGTACCAG CAGAAGCCAGGATCCTCCCCCAACCTGGATTTATGCCACATCCAACCTGGCT TCTGGAGTCCCTGCTCGCTTCAAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCA CAATCAGCAGAGTGGAGGCTGAAGATGCTGCCACTTATTACTGCCAGCAGTGG AGTAGTAACCCACTCACGTTTCGGTGCTGGGACCAAGCTGGAGCTGAAA
847.15H11	824	GAGGTCCAGCTTCAGCAGTCTGGGGCTGAAGTTGTGAAGCCTGGGGCTCCAGTG AAGCTGTCTGCAAGGCTTCTGGCTACACCTTCAACAACCTACTGGCTGAACCTGG GTGAAACAGCGGCCTGGACGAGGCCTCGAGTGGATTGGAAGGATTGATCCTTC CGATAGTGAACTCACTACAATCAAAAGTTCAAGGACAAGGCCACACTGACTG TAGACATGTCTCCAGCACAGCCTACATCCAACCTCAGCAGCCTGACATCTGAGG ACTCTGCGGTCTATTACTGTGCAAGAGGGGATTATTATTACGGTACTAGGGGTC CTATGGACTACTGGGGTCAAGGCACCTCAGTCACCGTCTCCTCA
847.20H7	825	CAGGTCCAGCTGCAGCAGTCTGGGGCTGAGCTGGTGAGGCCTGGGGCTTCAGT GAACCTGTCTGCAAGGCTTCTGGCTACACCTTCAACAACCTACTGGATGAACCTG GGTGAAGCAGAGGCCTGGACAAGGCCTTGAATGGGTTGGTATGATTGATCCTTC AGACAGTGAACTCACTACAATCAAATGTTCAAGGACAAGGCCACATTGACTA TAGACAAATCTTCCAGCATAGCCTACATGCAGCTCAGCAGCCTGACATCTGAGG ACTCTGCGGTCTATTACTGTGCAAGATGGGGTGCTATGGACTACTGGGGTCAAG GAACCTCAGTCACCGTCTCCTCA

FIG. 37 cont.

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Antibody	SEQ ID NO:	V _H nucleic acid sequence
847.21B11	826	CAGGTGCAACTGAAGCAGTCAGGACCTGGCCTGGTGGCGCCCTCACAGAGCCT GTCCATCACTTGCACTGTCTCTGGATTTTCATTAACCAGCTATGGTGTACACTGG GTTTCGCCAGCCTCCAGGAAAGGGTCTGGAGTGGCTGGGAATAATATGGGCTGG TGGAAGCACAAATTATAATCCGGCTCTCATGTCCAGACTGAGCATCAGCAAAG ACAAATCCAAGAGCCAAGTTTCTTAAAAATGAACAGTCTGAAAAGTATGAC ACAGCCATGTACTACTGTGCCAGAGATCGGGCTTCATTACTACGGCCGGGGGCT ATGGACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
847.27B9	827	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACTATGGAATGAACTG GGTGAAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCA ACACTGGAGAGCCAACATATGCTGAAGAGTTCAAGGGACGGTTTGCCTTCTCTT TGGAGACCTCTGCCAGCACTGCCTATTTGCAGATCAACTACCTCAAAAATGAGG ACACGGCTACATTTTCTGTGCAAGATTGGACTATGATTACGACGAGGACTACT GGGGCCAAGGCACCACTCTCACAGTCTCCTCA
847.28D1	828	CAGGTGCAGCTTGTAGAGACCGGACCTGGCCTGGTGGCGCCCTCACAGAGCCT GTCCATCACTTGCACTGTCTCTGGGTTTTCATTAACCAGCTATGGTGTACACTGG ATTCGTCACTCTCCAGGAAAGGGTCTGGAGTGGCTGGGAATAATATGGGCTGGT GGAAGCACAGATTATAATTCGCCACTCATGTCCAGACTGAGCATCAGCAAAGA CAACTCCAAGAACCAAGTTTCTTAAAAATGAATAGTCTGCAGATTGATGACAC AGCCATATATTATTGTGCCAGTCTCCTTCTGGGTATGATTACGACGTGTTTGCT TCTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA
847.2B8	829	CAGGTACAAGTGAAGCAGTCAGGACCTGGCCTAGTGCAGCCCTCACAGAGCCT GTCCATCACTTGCACTGTCTCTGGGTTTTCATTAATCAACTATGGTGTACACTGG GTTTCGCCAATCTCCAGGAAAGGGTCTGGAGTGGCTGGGAGTGATATGGAGTGG TGGAAGCACAGACTATAATGCAGCTTTCATATCCAGACTGAGCATCAGCAAGG ACAATTCCAAGAGCCAAGTTTCTTAAAAATGAACAGTCTGCAAGCTGATGACA CAGCCATATATTACTGTGCCAGAATTTATTACTACGGTAGGGGCTATGCTATGG ACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCCTCA
847.3B3	830	CAGGTGCAGCTGAAGGAGTCAGGACCTGGCCTGGTGGCGCCCTCACAGAGCCT GTCCATCACTTGCACTGTCTCTGGGTTTTCATTAACCAGCTATGGTGTACACTGG ATTCGCCAGCCTCCAGGAAAGGGTCTGGAGTGGCTGGGAGGAATATGGGCTGG TGGAAGTACAGATTACAATTCGCCTCTCATGTCCCGACTGAGTATCACTAAAGA CAACTCCAAGAGCCAAGTTTCTTAAAAATGAACAGTCTGCAAAGTATGACAC AGCCATGTACTACTGTGCCAGTCTCCTTCTGGGTATGATTACGACGTGTTTGCT TACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA
849.1D2	831	CAGGTGCAGCTGAAGGAGTCAGGACCTGTCTGGTGGCGCCCTCACAGAGCCT GTCCATCACTTGCACTGTCTCTGGGTTTTCATTAAGCAGCTATGGTGTACACTGG GTTTCGCCAGCCTCCAGGAAAGGGTCTGGAGTGGCTGGGAGTAATATGGGCTGG TGGAAGCACAGATTATGATTACAGCTCTCATGTCCAGACTGAGCATCAGCAAAGA CAACTCCAAGAGCCAAGTTTCTTAAAAATGGACAGTCTGCAAAGTATGACAC AGCCATGTACTACTGTGCCAAACCCCATATGATTACGACGGGGCCTGGTTTGC TTACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA
849.2D7	832	CAGGTGCAACTGCAGCAGTCTGGGCCTCAGCTGGTTAGGCCTGGGGCTTCAGTG AAGATATCCTGCAAGGCTTCTGGTTACTCATTACCAACTACTGGATGCACTGG GTGAAGCAGAGGCCTGGACAAGGTCTTGAGTGGATTGGCATGATTGATCCTTCC GATAGTGAAACTAGGTAAATCAGAAGTTCAAGGACAAGGCCACATTGACTGT AGACAAATCCTCCAGCACAGCCTACATGCAACTCAGCAGCCCGACATCTGAGG ACTCTGCGGTCTATTACTGTGCAACGGGGAGACCCGACTACTGGGGCCAAGGC ACCACCTCACAGTCTCCTCA

FIG. 37 cont.

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Antibody	SEQ ID NO:	V _H nucleic acid sequence
849.2F12	833	CAGGTGCAACTGCAGCAGTCTGGGCTCAGCTGGTTAGGCCTGGGGCTTCAGTG AAGATATCCTGCAAGGCTTCTGGTTACTCATTACCAGCTACTGGATGCACTGG GTGAAGCAGAGGCCCTGGACAAGGTCTTGAGTGGATTGGGCCACATAAGCTTCC GATAGTGAAACTAGGTAAATCAGAAGTTCAAGGACAAGGCCACATTGACTGT AGACAAATCCTCCAGCACAGCCTACATGCAACTCAGCAGCCCCGACATCTGAGG ACTCTATAGTCTATTACTGTGCAAAGGGGAGACCCGACTACTGGGGCCAAGGC ACCACTCTCACAGTCTCTCA
849.4B2	834	GATGGAAAACCTTCAGGAGTCAGGACCTGGCCTCGTGAAACCTTCTCAGTCTCTG TCTCTCACCTGCTCTGTCACTGGCTACTCCATCACCAGTGGTTATTACTGGAAC GGATCCGGCAGTTTCCAGGAAAACAACTGGAATGGATGGGCCACATAAGCTAC GATGGTAGAAATAACTACAACCCATCTCTCAAAAATCGAATCTCCATCACTCGT GACACATCTAAGAACCAGTTTTCCTGAAGTTGAATCTGTGACTACTGAGGAC ACAGCCACATATTACTGTGCAGGCTATGATTTCCTCTGGTACTTCGATGTCTGGG GCACAGGGACCACGGTCACCGTCTCTCA
849.4F12	835	CAGGTGCAGCTGAAGGAGTCTGGCCCTGGGATATTGCAGCCCTCCCAGACCCTC AGTCTGACTTGTCTTTCTCTGGGTTTCACTGAGCACTTTGGTATGGGTGTAG GCTGGATTCTGTCAGCCTTCAGGGAAGGGTCTGGAGTGGCTGGCACACATTTGGT GGGATGATGATAAACTATAACCCAGCCCTGAAGAGCCGGCTCACAATCTCC AAGGATACCTCAAAAACCAGGTCTTCCTCAGGATCGCCAATGTGGACACTGCA GATAATGCCACATATTACTGTGCTCGAATCGACTATGGTGACTACGTCGGGTTT GCTTATTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA
849.4F2	836	GATGGACAGCTTCAGGAGTCAGGACCTGGCCTCGTGAAACCTTCTCAGTCTCTG TCTCTCACCTGCTCTGTCACTGGCTACTCCATCACCAGTGGTTATTACTGGAAC GGATCCGGCAGTTTCCAGGAAAACAACTGGAATGGATGGGCCACATAAGCTAC GATGGTAGAAATAACTACAACCCATCTCTCAAAAATCGAATCTCCATCACTCGT GACACATCTAAGAACCAGTTTTCCTGAAGTTGAATCTGTGACTACTGAGGAC ACAGCCACATATTACTGTGCAGGCTATGATTTCCTCTGGTACTTCGATGTCTGGG GCACAGGGACCACGGTCACCGTCTCTCA
849.5C2	837	GAGGTTCAGCTGCAGCAGTCTGGGGCAGAGCTTGTGAAGTCAGGGGCTCAGT CAAGTTGTCTGCAAGCTTCTGGCTTCAACATTAAAGACTACTATATGCACTG GGTGAAGCAGAGGACTGAACAGGGCCTGGAGTGGATTGGAAGGATTTATCCTG AGGATGATGAACTAAATATGCCCCGAAATTCCAGGGCAAGGCCACTATAACA GCAGACACATCTCCAAACACAGCCTACCTGCAGCTCAGCAGCCTGACATCTGAG GACACTGCCGTCTATTACTGTGCTAGATCAGGGGGTTACTACGTTTGGTTTGCTT ACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA
849.8D12	838	GAGGTCCAGCTACAACAGTCTGGACCTGAGCTGGTGAAGCCTGGGTCTTCAGTG AAGATATCCTGCAAGGCTTCTAGATACACATTCACTGACTACAACATGGACTGG GTGAAGCAGAGCCATGGAAAGAGACTTGAGTGGATTGGATATATTTATCCTAA CAATGGTGGTACTGGCTACAACCAGAAGTTCAAGGGCAAGGCCACATTGACTG TAGACAAGTCTCCAGCACAGCCTACATGGAGCTCCGCAGCCTGACATCTGAGG ACTCTGCAGTCTATTACTGTGCAAGGTCTACTACGATGGTAGCTACGATGCTA TGGACTACTGGGGTCAAGGAACCTCAGTCACCGTCTCTCA
F847C.21H6	839	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGT CAAGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAATCTTTGGAATGAACTG GGTGAAGCAGGCTCCAGGAAAGGGTTAAAGTGGATGGGCTGGGTAAACACCT ACACTGGAGAGCCAACATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTT TGGAAACCTCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGG ACACGGCTACATATTTCTGTGCAAGAGGCTGGTTTGCTTACTGGGGCCAAGGGA CTCTGGTCACTGTCTCTGCA

FIG. 37 cont.

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Antibody	SEQ ID NO:	V _L nucleic acid sequence
TB001 (IMT001-4)	289	GACATCGTGCTGACCCAGTCTCCACTGAGCCTGCCTGTTACACCTGGCGAGCCAGCC TCCATCTCCTGCAGATCCTCTAAGTCCCTGCTGTACAAGGACGGCAAGACCTACCTG AACTGGTTCCCTGCAGAAGCCCGGCCAGTCTCCTCAGCTCCTGATCTACCTGATGAGC ACCCATGCCTCTGGCGTGCCCGATAGATTTTCCGGCTCTGGCTCTGGCACCAGCTTC ACCCTGAAGATCTCCAGAGTGAAGCCGAGGACGTGGGCGTGTACTACTGTTCAGCA GCTGGTGGACTACCTCTGACCTTTGGCGGCGGAACAAAGCTGGAAATCAAG
TB006 (4A11.H3L1)	290	GATATAGTGATGACCCAAACACCTTTGTCCCTGTCAGTCACCCAGGCCAACCCGCA TCTATCTCATGCAAATCCTCAAAAAGTCTTTTGCAGCTCTGACGGGATAACATATCTC TACTGGTATCTTCAAAAACCTGGTTCAGTCCCCCAGCTCTTGATCTATAGAATGAGT AACCTTGCCTCTGGTGTCCCCGACCGGTTTGTAGTGAAGCGGGTCTGGGACCGACTTC ACCCTCAAGATTAGTCGCGTCGAAGCCGAAGATGTGGGAGTGTATTACTGTGCCCA GATGCTCGAATTCCCCCTGACATTTGGTCAAGGAACTAAATTGGAGATTAAG
12G5.D7	291	GACATCCTGATGACCCAATCTCCATCCTCCATGTCTGTATCTCTGGGAGACACAGTC AGCATCACTTGCCATGCAAGTCAGGGCATTAACTCTAATATGGGGTGGTTGCAGCA GAAACCAGGGAAATCATTTAAGGGCCTGATCTATCATGCAACCAACTTGGGAAGATG GAGTTCCATCAAGGTTTCAGTGGCAGTGGATCTGGAGCAGATTATTCTCTACCATCA GCAGCCTGGAATCTGAAGATTTTGCAGACTATTACTGTGTACAGTATGCTCAGTTTC CTCCTACGTTTCGGATCGGGGACCAAGCTGGAAATAAAA
13A12.2E5	292	GATGTTGTGATGACCCAGACTCCACTCACTTTGTTCGGTTGCCATTGGACAACCAGCT TCCATCTCTTGCAAGTCGAGTCAGAGCCTCTTATATACTAATGGAAAAACCTATTTG AATTGGTTATTACAGAGGCCAGGCCAGTCTCCAAAACGCCTAATCTATCTGCTGTCT AAATTGGACTCTGGAGTCCCTGACAGGTTTCAGTGCCAGTGGATCAGGGACAGATTT CACACTGAAAATCAGCAGAGTGGAGGCTGAGGATTTGGGAGTTTATTACTGCTTGC AGAGTACACATTTTCCGCTCACGTTTCGGTGCTGGGACCAAGCTGGAGATGAAA
14H10.2C9 (14H10)	293	GATGTTGTGATGACCCAGACTCCACTCACTTTGTTCGGTTACCATTTGGACAACCAGCC TCCATCTCTTGCAAGTCAAGTCAGAGCCTCTTCGATAGTGATGGAAAGACATATTTG AATTGGTTGTACAGAGGCCAGGCCAGTCTCCAAAGCGCCTAATCTATCTGGTGTCT AAACTGGACTCTGGAGTCCCTGACAGGTTTCAGTGGCAGTGGATCAGGGACAGATTT CACACTGAAAATCAGCAGAGTGGAGGCTGAGGATTTGGGAGTTTATTATTGCTGGC AAGGTACACATTTTCCCTCTCACGTTTCGGTGCTGGGACCAAGCTGGAAATGAAA
15F10.2D6 (15F10)	294	GATGTTTTGATGACCCAAACTCCACTCTCCCTGCCTGTCAGTCTTGGAGATCAAGCC TCCATCTCTTGCAAGTCTAGTCAGAGCATTGTACATAATAATGGAAACACCTATTTA GAATGGTACCTGCAGAAACCAGGCCAGTCTCCAAAACCTCTGATCTACAAAGTTTC CAACCGATTTTCTGGGGTCCAGACAGGTTTCAGTGGCAGTGGATCAGGGACAGATT TCACACTCAAGATCAGCAGAGTGGAGGCTGAGGATCTGGGAGTTTATTACTGCTTTC AAGGTTTCACATGTTCCGCTCACGTTTCGGTGGTGGGACCAAGTTGGAGCTGAAA
19B5.2E6 (19B5)	295	GATATACAAATGACTCAAACCTCTCTCTTTCCGCATCTTTGGGTGATCGGGTC ACTATATCCTGCTCCGCTCTCAAGGCATAAACAATTACCTGAATTGGTATCAGCAA AAACCAGACGGAAGTGTAAATTTGCTTATCTACTACGCTTCAAGTCTGCATAGTGGG GTTCCCAGCAGATTTTCCGGTTCGGGTCCGGCACTGATTATTCTCTCACAATTAGT AACCTGGAACCTGAGGACATTGCAACTTATTACTGTCAACAATACAGTCAGGTACCT TACACTTTCGGATCAGGAACAAAGTTGGAAATCAAG
20D11.2C6 (20D11)	296	GACATCCAGATGAACCAGTCTCCATCCAGTCTGTCTGCATCCCTCGGAGACACAATT ACCATCACTTGCCGTGCCAGTCAGAACATTTATATTGGTTAAGTTGGTACCAGCAG AAACCAGGAAATATTCTAAACTCTTGATCTATAAGGCTTCCAACCTTGCACACAGGC GTCCCATCAAGTTTGTAGTGGCAGTGGATCTGGAACAGATTTACATTAACCATCAGC ACTCTGCAGCCTGAAGACATTGCCACTTACTTCTGTCTCCAGGGTCAAAGTTATCCT CTCACGTTTCGGTGCTGGGACCAAGCTGGAGATGAAA

FIG. 38

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Antibody	SEQ ID NO:	V _L nucleic acid sequence
20H5.A3 (20H5)	297	GATATCCAGATGACACAGACTACATCCTCCCTGTCTGCCTCTCTGGGAGACAGAG TCACCATCAATTGCAGTGCAAGTCAGGACATTAGCAATTATTTAAACTGGTATCA GCAGAAACCAGATGGAACCTGTTAAACTCCTGATCTATTACACATCAAGTTTACTCT CAGGAGTCCCATCAAGGTTTCAGTGGCAGTGGGTCTGGGACAGATTATTCTCTCAC CATCAGCAACCTGGAACCTGAAGATATTGCCACTTACTTTTGTTCAGCAATATAGTA AGCTTCCCTATACGTTTCGGATCGGGGACCCACCTGGAAATAAAA
23H9.2E4 (23H9)	298	GATATCCAGATGACACAGACTACATCCTCCCTGTCTGCCTCTCTGGGAGACAGAG TCACCATCAGTTGCAGTGCAAGTCAGGACATTAAACAATTATTTAAACTGGTATCA GCAGAAACCAGATGGAACCTGTTAAACTCCTGATCTATTACGCATCAAGTTTACAC TCAGGAGTCCCATCAAGGTTTCAGTGGCAGTGGGTCTGGGACAGATTATTCTCTCA CCATCAGCAACCTGGAACCTGAAGATATTGCCACTTACTATTGTTCAGCAGTATAG TCAGGTTCCGTATACGTTTCGGATCGGGGACCAAGTTGGAAATAAAA
2D10.2B2 (2D10)	299	GACATAGTAATGACACAGGCCGCATTAGCAAATCCAGTAACCTTGGGCACATCCG CCTCCATATCTTGCAGGTCATCCAAAAGCTTGCTGCACTCTGACGGTATTACTTAC CTGTACTGGTATTTGCAGCGACCTGGGCAATCCCCTCAACTCCTGATTTACGCAT GAGCAACCTGGCCTCAGGGGTGCTTGACCGCTTTTCAGGATCAGGGAGCGGCACT GACTTCACCTTGCGAATCAGCAGAGTAGAAGCAGAGGATGTTGGAGTTTACTACT GTGCCCAGATGATCGAATTTCCACTTACTTTTGGGGCCGGGACCATTCTGGAGCTT AAA
3B11.2G2 (3B11)	300	GATGTTGTGATGACCCAGACTCCACTCCTTTGTTCGGTTGCCATTGGACAACCAGC TTCCATCTCTTGCAAGTCGAGTCAGAGCCTCTTATATACTAATGGAAAAACCTATT TGAATTGGTTATTACAGAGGCCAGGGCAGTCTCCAAAACGCCTAATCTATCTGGT GTCTAAATTGGACTCTGGAGTCCCTGACAGGTTTCAGTGGCAGTGGATCAGGGACA GATTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATTTGGGAGTTTATTACT GCTTGCAGAGTACACATTTTCCGCTCACGTTTCGGTGTCTGGGACCAAGCTGGAGCT GAAA
7D8.2D8 (7D8)	301	GATGTTTTGATGACCCAAACTCCACTCTCCCTGCCTGTCTGAGTCTTGGAGATCAAGC CTCCATCTCTTGCAAGTCAGTCTAGTCAGAGCATTGTACATAGTAATGGAAACACCTATT TAGAATGGTACCTGCAGAAACCAGGCCAGTCTCCAAAGCTCCTGATCTACAAAGT TTCCAACCGATTTTCTGGGGTCCCAGACAGGTTTCAGTGGCAGTGGATCAGGGACA GATTTACACTCAAGATCAGCAGAGTGGAGGCTGAGGATCTGGGAGTTTATTACT GCTTTCAAGGTTACATGTTCCGCTCACGTTTCGGTGTCTGGGACCAAGCTGGAGCTG AAA
F846C.1B2	302	AACATTTGGTTGACACAGTCGCCATCATCTCTGGCTGTGTCTGCAGGAGAAAATGG TCACTATGACCTGTAAGTCCAGTCAAAGTGTTTTATACAGTTCAAATCAGAAGAA CTACTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATCTAC TGGGCATCCACTAGGGAATCTGGTGTCCCTGATCGCTTCACAGGCAGTGGATCTG GGACAGACTTTTCTCTTACCATCAGCAGTGTACAAGCTGAAGACCTGGCAGTTTAT TACTGTCATCAATATCTCTCCCTCGCTCACGTTTCGGTGTCTGGGACCAAGCTGGAGCT GAAA
F846C.1F5 (846.1F5)	303	AACATTATGATGACACAGTCGCCATCATCTCTGGCTGTGTCTGCAGGAGAAAAGG TCACTATGAGCTGTAAGTCCAGTCAAAGTGTTTTATACAGTTCAAATCAGAAGAA CTACTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATCTAC TGGGCATCCACTAGGGAATCTGGTGTCCCTGATCGCTTCACAGGCAGTGGATCTG GGACAGATTTTACTCTTACCATCAGCAGTGTACAACCTGAAGACCTGGCAGTTTAT TACTGTCATCAATACCTCTCCTCGCTCACGTTTCGGTGTCTGGGACCAAGCTGGAGCT GAAA

FIG. 38 cont.

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Antibody	SEQ ID NO:	V _L nucleic acid sequence
F846C.1H12 (846.1H12)	304	AACATTATGATGACACAGTCGCCATCATCTCTGGCTGTGTCTGCAGGACAAAAGG TCACTATGAGCTGTAAGTCCAGTCAAAGTGTTTTATACAGTTCAAGTCAGAAGAA CTACTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAACTTCTGATCTACT GGGCATCCACTAGGGAATCTGGTGTCCCTGATCGCTTCTCAGGCAGTGGATCTGG GACAGATTTTACTCTTACCATCAGCAGTGTACAACCTGAAGACCTGGCAGTTTATT ACTGTCATCAATACCTCTCCTCGCTCACGTTCCGGTGTCTGGGACCAAGCTGGAGCTG AAA
F846C.1H5 (846.1H5)	305	GATGTTGTGATGACCCAAACTCCACTCTCCCTGCCTGTCAGTCTTGGAGATCAAGC CTCCATCTCTTGCAGATCTAGTCAGAGCCTTGTACACAATAGTGGAACACCTATT TACATTGGTACCTGCAGAGGCCAGGCCAGTCTCCAAACCTCCTGATCTACAAAGT TTCCAACCGATTTTCTGGGGTCCCAGACAGGTTCAAGTGGCAGTGGATCAGGGACA GATTTCACTCAAGATCAGCAGAGTGGCGGCTGAGGATCTGGGAGTTTATTCT GCTCTCAAAGTACACATGTTCTCCGACGTTCCGGTGGAGGCACCAAGCTGGAAAT CAAA
F846C.2H3 (846.2H3)	306	AACATTATGATGACACAGTCGCCATCATCTCTGGCTGTGTCTGCAGGAGAAAAGG TCACTATGAGCTGTAAGTCCAGTCAAAGTGTTTTATACAGTTCAAATCAGAAGAA CTACTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATCTAC TGGGCATCCACTAGGGAATCTGGTGTCCCTGATCGCTTACAGGCAGTGGATCTG GGACAGATTTTACTCTTACCATCAGCAGTGTACAACCTGAAGACCTGGCAGTTTAT TACTGTCATCAATACCTCTCCTCGCTCACGTTCCGGTGTCTGGGACCAAGCTGGAGCT GAAA
F846TC.14A2 (846T.14A2)	307	CAGGCTGTTGTGACTCAGGAATCTGCACTCACCACATCACCTGGTGAAACAGTCA CACTCACTTGTCTGCTCAAGTACTGGGGCTGTTACAAGTAACTATGCCAACTGG GTCCAAGAAAAACCAGATCATTTATTTCACTGGTCTAATAGGTGGTATCAATAACC GAGTTCCAGGTGTTCTGCCAGATTCTCAGGCTCCCTGATTGGAGACAAGGCAGC CCTCACCATCACAGGGGCACAGACTGAGGATGAGGCAATATATTTCTGTGCTCTA TGGTATAGCAACCATTGGGTGTTCCGGTGGAGGAACCAAAGTCACTGTCCTA
F846TC.14E4 (846T.14E4)	308	GATATTGTGATGACGAGGCTGCATTCTCCAATCCAGTCACTCTTGGAAACATCAGC TTCCATCTCCTGCAGGTCTAGTAAGAGTCTCCTACATACTAATGGCATCACTTTT TGTATTGGTATCTGCAGAAGCCAGGCCAGTCTCCTCAGCCCCTGATTTATCAGATG TCCAACCTTGCCCTCAGGAGTCCCAGACAGGTTCAAGTACAGTGGGTCAGGAACTG ATTTCACTGAGAATCAGCAGAGTGGAGGCTGAGGATGTGGGTGTTTATTACTG TGCTCAAAATCTAGAACTTCCTTGGACGTTCCGGTGGAGGCACCAAGCTGGAAATC AAT
F846TC.16B5 (846T.16B5)	309	AACATTATGATGACACAGTCGCCATCATCTCTGGCTGTGTCTGCAGGAGAAAAGG TCACTATGAGCTGTAAGTCCAGTCAAAGTGTTTTATACAGTTCAAATCAGAAGAA CTACTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAACTACTGATCTAC TGGGCATCCACTAGGGAATCTGGTGTCCCTGATCGCTTACAGGCAGTGGATCTG GGACAGATTTTACTCTTACCATCAGCAGTGTACAAGCTGAAGACCTGGCAGTTTA TTACTGTCATCAATACCTCTCCTCGCTCACGTTCCGGTGTCTGGGACCAAGCTGGAGC TGAAA
F846TC.7F10 (846T.7F10)	310	GACATTGTGATGACACAGTCTCCATCCTCCCTGGCTATGTCAGTAGGACAGAAGG TCACTATGAGCTGCAAGTCCAGTCAGAGCCTTTTAAATAGTAGCAATCAAAAAGAA CTATTTGGCCTGGTACCAGCAGAAACCAGGACAGTCTCCTAAACTTCTGGTATACT TTGCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCATAGGCAGTGGATCTGG GACAGATTTCACTCTTACCATCAGCAGTGTGCAGGCTGAAGACCTGGCAGATTAC TTCTGTCAGCAACATTATAGCACTCCGTACACGTTCCGGAGGGGGGGCCAAAGCTGG AAATAAAA

FIG. 38 cont.

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Antibody	SEQ ID NO:	V _L nucleic acid sequence
F847C.10B9 (847.10B9)	311	GACATCCGGATGACTCAGTCTCCATCCAGTCTGTCTGCATCCCTTGGAGACACAAT TACCATCACTTGCCATGCCAGTCAGAACATTAATGTTTGGTTAAGCTGGTACCAGC AGAAACCAGGAAATATTCCTAAACTATTGATCTATAAGGCTTCCAACCTGACAC AGGCGTCCCATCAAGGTTTAGTGGCAGTGGATCTGGAACAGGTTTCACATTAACC ATCAGCAGCCTGCAGCCTGAAGACATTGCCACTTACTACTGTCAACAGGGTCAAA GTTATCCGTACACGTTCCGGAGGGGGGACCAAGCTGGAGCTGAAA
F847C.11B1 (847.11B1)	312	GAAATTGTGTTGACCCAGTCTCCAGCATCCCTGTCCGTGACTACAGGAGAAAAAG TCACTATCAGATGCATAACCAGCATTGATATTGATGATGATATGAACCTGGTACCA GCAGAAAGCCAGGGGAACCTCCTAAGCTCCTTATTCAGAAAGGCAATACTCTTCGT CCTGGAGTCCCATCCCGATTCTCCAGCAGTGGCTATGGCACAGATTTTGTTTTAC AATTGAAAACACGCTCTCAGAAGATGTTGCAGATTACTACTGTTTGCAAAGTGAT AACAAGCCTCTCACGTTCCGGTGCTGGGACCAAGCTGGAGCTGAAA
F847C.12F12 (847.12F12)	313	GACATCCAGGTGATTCACTCTCCATCCAGTCTGTCTGCATCCCTTGGAGACACAAT TACCATCACTTGCCATGCCAGTCAGAACATTAATGTTTGGTTAAGCTGGTACCAGC AGAAACCAGGAAATATTCCTAAACTATTGATCTATAAGGCTTCCAACCTGACAC AGGCGTCCCATCAAGGTTTAGTGGCAGTGGATCTGGAACAGGTTTCACATTAACC ATCAGCAGCCTGCAGCCTGAAGACATTGCCACTTACTACTGTCAACAGGGTCAAA GTTATCCGTACACGTTCCGGAGGGGGGACCAAGCTGGAGCTGAAA
F847C.26F5 (847.26F5)	314	GAAATTAAGATGAACCACTCTCCATCCAGTCTGTCTGCATCCCTTGGAGACACAA TTACCATCACTTGCCATGCCAGTCAGAACATTAATGTTTGGTTAAGCTGGTACCAG CAGAAACCAGGAAATATTCCTAAACTATTGATCTATAAGGCTTCCAACCTGACAC CAGGCGTCCCATCAAGGTTTAGTGGCAGTGGATCTGGAACAGGTTTCACATTAAC CATCAGCAGCCTACAGCCTGAAGACATTGCCACTTACTACTGTCAACAGGGTCAA AGTTATCCGTACACGTTCCGGAGGGGGGACCAAGCTGGAGCTGAAA
F847C.4B10 (847.4B10)	315	CAGGCTGTTGTGACTCAGGAATCTGCACTCACCACATCACCTGGTGAAACAGTCA CACTCACTTGTGCTCAAGTACTGGGGCTGTTACAACCTAGTAACCTATGCCAAGTGG GTCCAAGAAAAACCAGATCATTATTCAGTGGTCTAATAGGTGGTACCAACAACC GAGCTCCAGGTGTTCTGCCAGATTCTCAGGCTCCCTGATTGGAGACAAGGCTGC CCTCACCATCACAGGGGCACAGACTGAGGATGAGGCAATATATTTCTGTGCTCTA TGGTACAGCAACCATTTAGTGTTCGGTGGAGGAACCAAACTGACTGTCCTA
F849C.8D10 (849.8D10)	316	GATGTTTTGATGACCCAACTCCACTCTCCCTGCCTGTCAGTCTTGGAGATCAAGC CTCCATCTCTTGCAGATCTAGTCAGGACATTGTGCATAGTAGTGGAACACCTATT TAGAATGGTACCTGCAGAAACCAGGCCAGTCTCTAAAGCTCCTGATTTACAAAGT TTCCAACCGATTTTCTGGGGTCCCAGACAGGTTCAAGTGGCAGTGGATCAGGGACA GATTTCACTCAAGATCAGCAGAGTGGAGGCTGAGGATCTGGGAGTTTATTACT GCTTTCAAGGTTACATGTTCTCCACGTTCCGGCTCGGGGACAAAGTTGGAAT AAAA
F849C.8H3	317	GATATTGGGATGAGGCAGGCTGCATTCTCCAATCCAGTCACTCTTGGAACATCAG CTTCCATCTCCTGCAGGTCTAGTAAGAGTCTCCTATATAGTAATGGCATCACTTAT TTGTATTGGTTTCTCCAGAAGCCAGGCCAGTCTCCTCAGCTCCTGATTTATCAGAT GTCCAACCTTGCCTCAGGAGTCCCAGACAGGTTCAAGTACAGTGGGTGAGGAACT GATTTCACTGAGAATCAGCAGAGTGGAGGCTGACGATGTGGGTGTTTATTACT GTGCTCAAAATCTAGAATTCCGTGGACGTTCCGGTGGAGGCACCAAGCTGGAAAT CAAA

FIG. 38 cont.

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Antibody	SEQ ID NO:	V _L nucleic acid sequence
846.2B11	518	GACATTGTGCTGACACAGTCTCCTGCTTCCTTAGGTGTTTCTCTGGGGCAGAGGGC CACCATCTCATGCAGGGCCAGCAAAAGTGTCTAGTACATCTGGCTATAGTTATATG CACTGGTACCAACAGAAACCAGGACAGCCACCCAAACTCCTCATCTATCTTGCAT CCATCCTAGAATCTGGGGTCCCTGCCAGGTTTCAGTGGCAGTGGGTCTGGGACAGA CTTCACCCTCAACATCCATCCTGTGGAGGAGGAGGATGCTGCAATCTATTACTGTC AGCACAGTAGGGAGCTTCCTCTCACGTTTCGGTGCTGGGACCAAGCTGGAGCTGAA A
846.4D5	519	AACATTGTGCTGACCCAATCTCCAGCTTCCTTGGCTGTGTCTCTAGGGCAGAGGGC CACCATATCCTGCAGAGCCAGTGAAAGTGTGATAGTTATGGCAATAGTTTATG CACTGGTACCAGCAGAAACCAGGACAGCCACCCAAACTCCTCATCTATCTTGCAT CCAACCTAGAATCTGGGGTCCCTGCCAGGTTTCAGTGGCAGTGGGTCTAGGACAGA CTTCACCCTCACCATTGATCCTGTGGAGGCTGATGATGCTGCAACCTATTACTGTC AGCAAAATAATGAGGATCCGTGGACGTTTCGGTGGAGGCACCAAGCTGGAAATCA AA
847.14H4	520	CAGGCTGTTGTGACTCAGGAATCTGCACTCACCACATCACCTGGTGAAACAGTCA CACTCACTTGTGCTCAAGTACTGGGGCTGTTACAAGTAACTATGCCAACTGG GTCCAAGAAAAACCAGATCATTATTCAGTGGTCTAATAGGTGGTACCAACAACC GAGCTCCAGGTGTTCTGCCAGATTCTCAGGCTCCCTGATTGGAGACAAGGCTGC CCTCACCATCACAGGGGCACAGACTGAGGATGAGGCAATATATTTCTGTGCTCTA TGGTACAGCAACCATTTAGTGTTTCGGTGGAGGAACCAAACTGACTGTCCTA
846T.1H2	521	GATGTTGTGATGACCCAGACTCCACTCACTTGTTCGGTTACCATTGGACAACCAGC CTCTATCTCTTGCAAGTCAAGTCAGAGTCTCTTATATAGTAATGAAAAACCTATT TGAATTGGTTATTACAGAGGCCAGGCCAGTCTCCAAAGCGCCTAATCTATCTGGT GTCTAAACTGGACTCTGGAGTCCCTGACAGGTTCACTGGCAGTGGATCAGGAACA GATTTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATTGGGAGTTTATTACT GCGTGCAAGGTACACATTTTCCTCAGACGTTTCGGTGGAGGCACCAAGCTGGAAAT AAAA
mIMT001	522	GATATTGTTATTACTCAGGATGAGCTTAGTAATCCTGTCACTAGCGGGGAAAGTG TTAGTATCAGTTGTGCTTCATCCAAGTCACTCCTCTACAAAGACGGCAAGACTTAT CTCAACTGGTTTCTTCAACGACCCGGTCAATCTCCACAGCTCCTGATTTACCTGAT GTCAACTCACGCTTCTGGTGTTAGCGACCGTTTCTCCGGAAGTGGCTCCGGGACA GACTTCACTCTTGAAATCTCACGTGTAAAAGCAGAGGACGTAGGTGTCTATTATT GTCAACAGCTTGTGGACTACCCCTTGACCTTGGCGCTGGCACAAGCTGGAACCT GAAG
4A11.2B5	523	GACATTGTGATGACTCAGGCAGCCTTTTCCAACCCTGTAACACTTGGAAGTGTG CTCCATCTCATGCCGTTCCAGCAAGAGTCTTTTGCACAGCGATGGGATAACCTATC TCTATTGGTATCTGCAACGACCCGGTCAGTCACCCCAACTTCTTATCTATCGAATG TCTAACTTGGCCTCCGGCGTGCCCCACCGCTTTTCCGGGAGTGGGAGCGGTACAG ATTTACCTTGCGAATTTCCCGGGTTGAGGCAGAGGACGTAGGTGTCTACTATTGT GCTCAGATGCTTGAGTTTCCTCTCACTTTCGGAGCCGGCACCAAACTGGAAGTGA AA
4A11.H1L1	524	GATATAGTGATGACCCAAACACCTTTGTCCCTGTCACTCAGTCAACCCAGGCCAACCCG CATCTATCTCATGCAAATCCTCAAAAAGTCTTTTGCAGTCTGACGGGATAACATAT CTCTACTGGTATCTTCAAAAACCTGGTTCAGTCCCCCAGCTCTTGATCTATAGAAT GAGTAACTTGCCTCTGGTGTCCCCGACCGGTTTGTGGAAGCGGGTCTGGGACC GACTTACCCCTCAAGATTAGTCGCGTCGAAGCCGAAGATGTGGGAGTGTATTACT GTGCCCAGATGCTCGAATTTCCCTGACATTTGGTCAAGGAATAAATTGGAGAT TAAG

FIG. 38 cont.

Antibody	SEQ ID NO:	V _L nucleic acid sequence
4A11.H4L2	525	GATATTGTAATGACCCAAAGCCCCCTGTCCTTGCCTGTTACCCCAGGTGAGCCTGC CAGCATATCTTGCCGATCCAGTAAATCTCTGCTTCATAGCGATGGCATCACCTATT TGTATTGGTATTTGCAGAAGCCCGGCCAGAGCCCCCAGTTGCTGATCTACAGAAT GTCCAACCTTGCTAGTGGAGTGCCCGACCGGTTTAGCGGTTTCAGGCTCAGGGACT GATTTCACTCTTAAATCAGTAGGGTAGAGGCCGAAGACGTTGGTGTATATTATT GTGCTCAGATGTTGGAGTTTCCACTCACATTGGACAAGGTACAAAGCTGGAAAT TAAG
4G2.2G6	526	GATGTCGTAATGACTCAAACCCCCCTGACCCCTTAGTGTTACTATAGGCCAGCCCCG AAGCATCTCTGCAAATCCTCCAGTCTCTTCTTTATACTGATGGCAAAACCTACT TGTCTTGGTTTTTGCAGCGCCAGGTCAAAGTCCTAAACGTCCTATTACTTGGTC TCTAACTCGATTCCGGCGTGCCTGACCGGTTCTCCGGTAGCGGTAGCGGTACCG ATTTCACTTTGAAGATTAGCCGAGTTGAGGCAGAAGACCTCGGGGTCTACTACTG CCTTCAGAGTACACACTTCCCACTTACATTTGGCGCAGGAACCAAGTTGGAGGTT AAA
6B3.2D3	527	AGTATTGTGATGACCCAGACTCCCAAATTCCTGCTTGTATCAGCAGGAGACAGGG TTACCATAACCTGCAAGGCCAGTCAGAGTGTGAGTAATGATGTAGCTTGGTACCA ACAGAAGCCAGGGCAGTCTCTAAATTGTTGATATATTATGCATCCAATCGCTAC ACTGGAGTCCCTGATCGCTTCACTGGCAGTGGATATGGGACGGATTTCACTTTCAC CATCAGCACTGTGCAGGCTGAAGACCTGGCAGTTTATTTCTGTCAGCAGGATTAT ACCTCTCCGTACACGTTCCGAGGGGGGACCAAGCTGGAAATAAAA
6H6.2D6	528	GACATCCAGATGACCCAGACCACCTCCTCCCTGTCCGCCTCCCTGGGCGACAGGG TGACCATCTCTGCTCCGCCCTCCAGGGCATCTCCAACCTGAACCTGGTACCAG CAGAAGCCCGACGGCACCGTGAAGCTGCTGATCTACTACACCTCCTCCCTGCACT CCGGCGTGCCCTCCAGGTTCTCCGGCTCCGGCTCCGGCACCGACTACTCCCTGACC ATCTCCAACCTGGAGCCCCGAGGACATCGCCACCTACTACTGCCAGCAGTACTCCG AGCTGCCCTACACCTTCGGCTCCGGCACCAAGCTGGAGATCAAG
9H2.2H10	529	GACATTGTGATGACCCAGTCTCACAAATTCATGTCCACATCAGTAGGAGACAGGG TCAGCATCACCTGCAAGGCCAGTCAGGATGTGAGTACTGCTGTAGCCTGGTATCA ACAAAAACCAGGGCAATCTCTAAACTACTGATTTACTGGGCATCCACCCGGCAC ACTGGAGTCCCTGATCGCTTACAGGCAGTGGATCTGGGACAGATTATACTCTCA CCATCAGCAGTGTGCAGGCTGAAGACCTGGCACTTTATTACTGTGACGAACATTA TACCACTCCGCTCACGTTCCGGTGTGGGACCAAGCTGGAGCTGAAA
13G4.2F8	530	GACATTGTGATGACCCAGTCTCAAAAATTCATGTCCACATCAGTAGGAGAGAGGG TCAGCATCACCTGCAAGGCCAGTCAGAATGTAGGTACTAATGTAGCCTGGTATCA GCAGAAAGCAGGGCAGTCTCTTGAAGTGTGATCTATGGGGCATCCAACCGGCAC ACTGGAGTCCCTGATCGCTTACAGGCAGTGGATCTGGGACAGATTTCACCTCTCA CCATCACC AATGTGCAGTCTGAAGACATGACAAATTATTTCTGTGAGCAATATAG CAACTTTCCTCTCACGTTCCGGTGTGGGACCAAGCTGGAGCTGAAA
13H12.2F8	531	GACGTTGTTATGACACAAACACCACTTACACTTTCTGTAACATATCGGTCAGCCTGC CTCAATTTTCATGTAAGTCTTCTCAGTCCCTGTTTCATAGCGACGGGAAGACTTACC TGAATTGGCTTCTCCAACGACAGGCCAATCACCCAAGCGCCTTATTTATTTGGTC AGTAAATTGGACAGTGGAGTTCCCGATAGATTTACCGGGAGCGGTTCTGGGACCG ATTTACCCCCAAAGATCTCCAGGGTAGAAGACGAAGATCTCGGTGTGTAATTTG CTGGCAGGGGACACATTTCCCTCTGACATTCCGGTGTGGAACCAAACTTGAGATG AAA

FIG. 38 cont.

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Antibody	SEQ ID NO:	V _L nucleic acid sequence
15G7.2A7	532	GACATCCAGATGAACCCAGTCTCCATCCAGTCTGTCTGCATCCCTCGGAGACACAA TTTCCATCACTTGCCGTGCCAGTCAGAACATTAATATTTGGTTAAGCTGGTACCAG CAGAAACCAGGAAATATTCCTCAACTATTGATCTATAAGGCTTCCAACCTGCACA CAGGCGTCCCCTCAAGGTTTAGTGGCAGTGGATCTGGAACAGATTTACATTAAC CATCAGCAGTCTGCAGCCTGAAGACATTGCCACTTACTACTGTCTACAGGGTCAA AGTTATCCTCTCACGTTCCGGTGCTGGGACCAAGCTGGTGATGAAA
19D9.2E5	533	GATGTTGTGATGACCCAGACTCCACTCACTTTGTTCGGTTACCATTTGGACAACCAGC CTCCATCTCTTGTAAGTCAAGTCAGAGCCTCTTACATAGTGATGGAAAGACATATT TGAATTGGTTGTTACAGAGGCCAGGCCAGCCTCCAAAGCGCCTAATGTATCTGGT GTCTACACTGGACTCTGGAGTCCCTGACAGGTTCACTGGCAGTGGATCAGGGACA GATTTCACTGAAAATCAGCAGAGTGGAGGCTGAGGATTTGGGAGTTTATTATT GCTGGCAAGGTACACATTTTCCTCTCACGTTCCGGTGCTGGGACCAAGCCGGAG
23B10.2B12	534	GATATTGTGATGACGCAGGCTGCATTCTCCAATCCAGTCACTCTTGGAACGTCAGC TTCCATCTCCTGCAGGTCTAGTAAGAGTCTCCTACATAGTGATGGCATCACTTATT TCTATTGGTATCTGCAGAGGCCAGGCCAGTCTCCTCAGTCTCTGATATATCGGATG TCCAACCTTGCCCTCAGGAGTCCCAGACAGGTTCACTGGCAGTGGGTCAGGAACTG ATTTCACTGAGAATCAGCAGAGTGGAGGCTGAGGATGTGGGTGTTTATTACTG TGCTCAAATGCTAGAATTCCCGCTCACGTTCCGGTGCTGGGACCAAGCTGGAG
24D12.2H9	535	GACATTGTGATGACCCAGTCTCACAAATTCATGTCCACATCAGTAGGAGACAGGG TCAGCATCACCTGCAAGGCCAGTCAGGATGTGCGTACTGCTGTAGCCTGGTATCA ACAGAAACCAGGGCAATCTCCTAAACTACTGATTTACTGGGCATCCACCCGGCAC ACTGGAGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTTCACTCTCA CCCTTAGCAATGTGCAGTCTGAAGACTTGGCAGATTATTTCTGTCAGCAATATAGT AGTTATCCGTGGACGTTCCGGTGGAGGCCACCAAGCTGGAAATCAAA

FIG. 38 cont.

Antibody	SEQ ID NO:	V _L nucleic acid sequence
846.2D4	840	AACATTGTGCTCACCCAATCTCCAGCTTCTTTGGCTGTGTCTCTAGGGCAGAGGGC CACCATATCCTGCAGAGCCAGTGAAAGTGTGATAGTTATGGCAATAGTTTATG CACTGGTACCAGCAGAAACCAGGACAGCCACCCAACTCCTCATCTATCTTGCA CCAACCTAGAATCTGGGGTCCCTGCCAGGTTTCAGTGGCAGTGGGTCTAGGACAGA CTTCACCCTCACCATTGATCCTGTGGAGGCTGATGATGCTGCAACCTATTACTGTC AGCAAAATAATGAGGATCCGTGGACGTTTCGGTGGAGGCACCAAGCTGGAAATAA AA
846.2F11	841	GACATCCTGATGACCCAATCTCCATCCTCCATGTCTGTATCTCTGGGAGACACAGT CAGCATCACTTGCCATGCAAGTCAGGGCATTAAACAGTAATATAGGGTGGTTGCAG CAGAAACCAGGGAAGTCATTTAAGGGCCTGATCTATCATGGAACCAACTTGAAG ATGGAGTTCCATCAAGGTTTCAGTGGCAGTGGATCTGGAGCAGATTATTCTCTCAC CATCAGCAGCCTGGAATCTGAAGATTTTGC GGACTATTACTGTGTACAGTATGATC AGTTTCCGTGGACGTTTCGGTGGAGGCACCAAGCTGGAAATCAAA
846T.10B1	842	GACATTGTGATGTACAGTCTCCTGCTTCCTTAGGTGTTTCTCTGGGGCAGAGGGC CACCATCTCATGCAGGGCCAGCAAAAGTGTGATACATCTGGCTATAGTTATATG CACTGGTACCAACAGAAACCAGGACAGCCACCCAACTCCTCATCTATCTTGCA CCATCCTAGAATCTGGGGTCCCTGCCAGGTTTCAGTGGCAGTGGGTCTGGGACAGA CTTCACCCTCAACATCCATCCTGTGGAGGAGGAGGATGCTGCAATCTATTACTGTC AGCACAGTAGGGAGCTTCCTCTCACGTTTCGGTGTCTGGGACCAAGCTGGAGCTGAA A
846T.2E3	843	GACATTGTGCTGACACAGTCTCCTGCTTCCTTAGCTGTATCTCTGGGGCAGAGGGC CACCATCTCATGCAGGGCCAGCAAAAGTGTGATACATCTGGCTATAGTTATATG CACTGGTACCAACAGAAACCAGGACAGCCACCCAACTCCTCATCTATCTTGCA CCATCCTAGAATCTGGGGTCCCTGCCAGGTTTCAGTGGCAGTGGGTCTGGGACAGA CTTCACCCTCAACATCCATCCTGTGGAGGAGGAGGATGCTGCAACCTATTACTGTC AGCACAGTAGGGAGCTTCCTCTCACGTTTCGGTGTCTGGGACCAAGCTGGAGCTGAA A
846T.4C9	844	GACATTTTGATGACCCAACTCCATCCTCCATGTCTGTATCTCTGGGAGACACAGT CAGCATCACTTGCCATGCAAGTCAGGGCATTAGCAGTAATATAGGGTGGTTGCAG CAGAAACCACGGAATCATTTAAGGGCCTGATCTATTATGGAACCAACTTGAAG ATGGAGTTCCATCAAGGTTTCAGTGGCAGTGGATCTGGAGCAGATTATTCTCTCAC CATCAGCAGCCTGGAATCTGAAGATTTTGCAGACTATTACTGTGTACAGTATGATC AGTTTCCGTGGACGTTTCGGTGGAGGCACCAAGCTGGAAATAAAA
846T.4E11	845	GACATTGTGCTGACACAGTCTCCTGCTTCCTTAGCTGTATCTCTGGGGCAGAGGGC CACCATCTCATGCAGGGCCAGCAAAAGTGTGATACATCTGGCTATAGTTGTATG CACTGGTACCAACAGAAACCAGGACAGCCACCCAACTCCTCATCTATCTTGCA CCAACCTAGAATCTGGGGTCCCTGCCAGGTTTCAGTGGCGGTGGGTCTGGGACAGA CTTCACCCTCAGCATCCATCCTGTGGAGGAGGAGGATGCTGCAACCTATTACTGTC ACCACAGTACGGAGCTTCCTGTACAGTTCGGAGGGGGGACCAAGCTGGAAGTAG AA
846T.4F5	846	GACATTGTGCTGACCCAATCTCCAGCTTCTTTGGCTGTGTCTCTAGGGCAGAGGGC CACCATATCCTGCAGAGCCAGTGAAAGTGTGATAGTTATGGCAATAGTTTATG CACTGGTACCAGCAGAAACCAGGACAGCCACCCAACTCCTCATCTATCTTGCA CCAACCTAGAATCTGGGGTCCCTGCCAGGTTTCAGTGGCAGTGGGTCTAGGACAGA CTTCACCCTCACCATTGATCCTGTGGAGGCTGATGATGCTGCAACCTATTACTGTC AGCAAAATAATGAGGATCCGTGGACGTTTCGGTGGAGGCACCAAGCTGGAAATCA AA

FIG. 38 cont.

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Antibody	SEQ ID NO:	V _L nucleic acid sequence
846T.8D1	847	GACATTGTGCTGACACAGTCTCCTGCTTCCTTAGCTGTATCTCTGGGGCAGAGGGGC CACCATCTCATGCAGGGCCAGCAAAAGTGTCTAGTACATCTGGCTATAGTTATATG CACTGGTACCAACAGAAACCAGGACAGCCACCCAAACTCCTCATCTATCTTGCAT CCATCCTAGAATCTGGGGTCCCTGCCAGGTTTCAGTGGCAGTGGGTCTGGGACAGA CTTCACCCTCAACATCCATCCTGTGGAGGAGGAGGATGCTGCAACCTATTACTGTC AGCACAGTAGGGAGCTTCCTCTCACGTTCCGGTGCTGGGACCAAGCTG
847.10C9	848	GATGTTGTGATGACCCAGACTCCACTCACTTTGTTCGGTTACCATTTGGACAACCAGC CTCTATCTCTTGCAAGTCAAGTCAGAGCCTCTTATATAGTGATGGAAAAACCTATT TGAATTGGTTATTACAGAGGCCAGGCCAGTCTCCAAAGCGCTAATCTATCTGGT GTCTCAACTGGACTCTGGAGTCCCTGACAGGTTCACTGGCAGTGGATCAGGAACA GATTTTACACTGAAAATCAGCAGAGTGGAGGCTGATGATTTGGGAGTTTATTGCT GCGTGCAAGGTACACATCTTCCACGTTCCGAGGGGGGACCAAGCTGGAAATAA AA
847.11D6	849	GACATTGTGATGACACAGTCTCCCGCTTCTTTGGCTGTGTCTCTAGGGCAGAGGGGC CACCATATCCTGCAGAGCCAGTGAAAGTGTGAAAATCATGTCAATAGTTTATG CACTGGTTCCAACAGAAACCAGGACAGCCACCCAAACTCCTCATCTATCGTGCAT CCAACCTACAATCTGGGATCCCTGCCAGGTTTCAGTGGCAGTGGGTCTAGGACAGA CTTCACCCTCACCATTAATCCTGTGGAGGCTGATGATGTTGCAACCTATTACTGTC AGCAAAATAATGAGGTCCCGTACACGTTCCGAGGGGGGACCAAGCTGGAAATAA AA
847.15D12	850	CAGGCTGTTGTGACTCAGGAATCTGCACTCACCACATCACCTGGTGAAACAGTCA CACTCACTTGTCGCTCAAGTACTGGGGCTGTTACAAGTAACTATGCCAACTGG GTCCAAGAAAAACCAGATCATTTATTCACTGGTCTAATAGGTGGTACCAACAACC GAGCTCCAGGTGTTCTGCCAGATTCTCAGGCTCCCTGATTGGAGACAAGGCTGC CCTCACCATCACAGGGGCACAGACTGAGGATGAGGCAATATATTTCTGTGCTCTA TGGTACAGCAACCATTTGGTGTTCCGGTGGAGGAACCAAACTGACTGTCCCTA
847.15F9	851	TCCCAGTCTCCAGCAATCCTGTCTGCATCTCCAGGGGAGAAGGTCACAATGACTT GCAGGGCCAGCTCAAGTGTAACTTACATGTACTGGTACCAGCAGAAGCCAGGATC CTCCCCCAACCCTGGATTTATGCCACATCCAACCTGGCTTCTGGAGTCCCTGCTC GCTTCAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCACAATCAGCAGAGTGG GGCTGAAGATGCTGCCACTTATTACTGCCAGCAGTGGAGTAGTAACCCACTCACG TTCGGTGCTGCCAGAATTTATTACTACGGTAGGGGCTATGCTATGGACTACGTGTT CATCTTCCCTCCCAGCGACGAGCAGCTG
847.15H11	852	GACATTGTGCTAACACAGTCTCCAGCTTCTTTGGCTGTGTCTCTAGGGCAGAGGGGC CACCATCTCCTGCAGAGCCAGCGAAAAGTCTTGATAATTCTGGCATTAGTTTTATGA ACTGGTTCCAACAGAGACCAGGACAGCCACCCAAACTCCTCATCTATGCTGCATC CAACCTAGAATCCGGGGTCCCTGCCAGGTTTATGTCAGTGGGTCTGGGACAGAC TTCAGCCTCAACATCCATCCTATGGAGGAGGATGATGCTGCAATGTATTTCTGTCA GCACAGTAAGGAGGTTCCTGGACGTTCCGGTGGAGGCACCAAGCTGGAAATCAA A
847.20H7	853	GACATTGTGATGACCCAGTCTCACAAAATCATGTCCACATCAGTAGGAGACAGGG TCAGCATCACCTGCAAGGCCAGTCAGGATGTGAGTACCAGTGGCCCTGGTTTCA GCAAAAACCAGGACAATCTCCTAAACTACTGCTTTACTGGGCATCCACCCGGCAC ACTGGAGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTATACTCTCA CCATCAGCAGTGTCCAGGCTGAAGACCTGGCACTTTATTACTGTCAGCAACATTAT AGCCCTCCATTACGTTCCGGCTCGGGGACCAAGCTGGAAATAAAA

FIG. 38 cont.

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Antibody	SEQ ID NO:	V _L nucleic acid sequence
847.21B11	854	GACATTGTGATGACTCAGTCTCAAAAATTCATGTCCACATCAGTAGGAGACAGGG TCAGCGTCACCTGCAAGGCCAGTCAAGATGTGGGTATTAATGTAGCCTGGTATCA ACAGAAACCAGGGCAATCTCCTAAAGCACTGATTACTCGGCATCCTACCGGTAC AGTGGAGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTCACTCTCA CCATCAGCAATGTGCAGTCTGAAGACTTGGCAGAGTATTTCTGTGTCAGCAATATAA TAGTTATCCGTACACGTTCCGGAGGGGGGACCAAGCTGGAAATGAAA
847.27B9	855	GACGTTGTGATGACCCAGACTCCACTCACTTTGTCTGGTTACCCCTTGGACAACCCGC CTCCATCTCTTGCAGGTCAAGTCAGAGCCTCTTAGATAGTGATGGAAAGACATAT TTGAATTGGTTGTTACAGAGGCCAGGCCAGTCTCCAAAGCGCCTAATCTATTTGGT GTCTAGACTGGACTCTGGAGTCCCTGACAGGTTCACTGGCAGTGGATCAGGGACA GATTTCACTGAAAATCAGCAGAGTGGAGGCTGAGGATCTGGGAGTTTATTATT GCTGGCAAGGTACACATTTTCCGTTACGTTCCGGAGGGGGGACCAAGCTGGAAAT AAAA
847.28D1	856	GACATCCGGATGACTCAGTCTCCAGCCTCCCTATCTGCATCTGTGGGAGAAACTGT CACCATCACATGTGCGAGCAAGTGGGAATATTCACAATTATTTAGCATGGTATCAT CAGAAACAGGGAAAATCTCCTCAGCTCCTGGTCTATAATGTAAAAACCTTAGCAG ATGGTGTGCCATCAAGGTTCAAGTGGCAGTGGATCAGGAACACAATTTTCTCTCAA GATCAACAGTTTGCAGCCTGAAGATTTTGGGACTTATTATTGTCAACATTTTGGGA GTATTTTCCGACGTTCCGGTGGAGGCACCAAGCTGGAAATAAAA
847.2B8	857	CAAATCTTCTCTCCAGTCTCCAGCAATCCTGTCTGCATCTCCAGGGGAGAAAGGT CACAATGACTTGCAGGGCCAGCTCAAGTGTAACTTACATGTACTGGTACCAGCAG AAGCCAGGATCCTCCCCCAACCTGGATTTATGCCACATCCAACCTGGCTTCTGG AGTCCCTGCTCGCTTCAAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCACAATCA GCAGAGTGGAGGCTGAAGATGCTGCCACTTATTACTGCCAGCAGTGGAGTAGTAA CCCACTCACGTTCCGGTGTCTGGGACCAAGCTGGAGCTGAAA
847.3B3	858	GACATTTTGATGACTCAGTCTCCAGCCTCCCTATCTGCATCTGTGGGAGAAACTGT CACCATCACATGTGCGAGCAAGTGGGAATATTCACAATTATTTAGCATGGTATCAG CAGAAACAGGGAAAATCTCCTCAACTCCTGGTCTATAGTGCAAAAACCTTAGCAG ATGGTGTGCCATCAAGGTTCAAGTGGCAGTGGATCAGGAACACAATTTTCTCTCAA GATCGACAGCCTGCAGCCTGAAGATTTTGGGACTTATTACTGTCAACATTTTGGGA GTCTTTTCCGACGTTCCGGTGGAGGCACCAAGCTGGAA
849.1D2	859	GACGTTGTGATGACCCAGACTCCCAAATTCCTGCTTGTATCAGCAGGAGACAGGG TTACCATAACCTGCAAGGCCAGTCAAAAGTGTGAGTAGTGATGTAGCTTGGTACCA ACAGAAGCCAGGGCAGTCTCCTAAACTGCTGATATACTTTGCATCCAATCGCTAC ACTGGAGTCCCTGATCGCTTCACTGGCAGTGGATATGGGACGGATTTCACCTTTCAC CATCAGCACTGTCCAGGCTGAAGACCTGGCAGTTTATTTCTGTGTCAGCATAATTATA TCTCTCCGTTACGTTCCGGAGGGGGGACCAAGCTGGAAATAAAA
849.2D7	860	GACATTGTGATGACCCAGTCTCACAAATTCATGTCCACATCAGTAGGAGACAGGG TCAGCATCACCTGCAAGGCCAGTCAAGATGTGAGTACTGCTGTAGCCTGGTATCA ACAAAAACCAGGGCAATCTCCTAAACTACTGATTACTGGGCATCCACCCGGCAC ACTGGAGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTATACTCTCA CCATCAGCAGTGTGCAGGCTGAAGACCTGGCACTTATTACTGTGTCAGCAACATTA TAGCACTCCGTACACGTTCCGGAGGGGGGACCAAGCTGGAAATAAAA

FIG. 38 cont.

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Antibody	SEQ ID NO:	V _L nucleic acid sequence
849.2F12	861	GACATTGCGATGACCCAGTCTCACAAATTCATGTCCACATCAGTAGGAGACAGGGTCAGCATCACCTGCAAGGCCAGTCAGGATGTGAGTACTGCTAGCCTGGTATCAACAAAAACCAGGGCAATCTCCTAAACTACTGATTACTGGGCATCCACCCGGCACACTGGAGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTATACTCTCACATCAGCAGTGTGCAGGCTGAAGACCTGGCACTTTATTACTGTCAGCAACATTA TAACACTCCGTACACGTTCCGGAGGGGGGACCAAGCTGGAAATAAAA
849.4B2	862	GATGTGGGGATGACCCAGACTCCACTCATTTTGTCTGGTTACCATTTGGACAACCAGCTTCCATCTCTTGCAAGTCAAGTCAGAGCCTCTTATATATTAATGGAAAAACCTATTGAATTGGTTATTACAGAGGCCAGGCCAGTCTCCAAAACGCCTAATCTATCTGGTGTCTAAATTGGACTCTGGAGTCCCTAACAGATTCAGTGGCAGTGGATCAGGGACAGATTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATTTGGGAGTTTATTACTGCTTGCAGAGTACACATTTTCTCAGACGTTCCGGTGGAGGCACCAAGCTGGAAATCAAAA
849.4F12	863	GACATCCTGCTGACCCAGTCTCCATCCTCCATGTCTGTATCTCTGGGAGACACAGTCAGCATCACTTGCCATGCAAGTCAGGGCATTAAACAGTAATATAGGGTGGTTGCAGCAGAAACCAGGGAAGTCATTTAAGGGCCTGATCTATCATGGAACCAACTTGGAAGATGGAGTTCCATCAAGGTTCAAGTGGCAGTGGATCTGGAGCAGATTATTCTCTCACATCAGCAGCCTGGAATCTGAAGATTTTGGCGACTATTACTGTGTACAGTATGATCAGTTTCCGTGGACGTTCCGGTGGAGGCACCAAGCTGGAAATCAAAA
849.4F2	864	GATGTTGGGATGACCCAGACTCCACTCATTTTGTCTGGTTACCATTTGGACAACCAGCTTCCATCTCTTGCAAGTCAAGTCAGAGCCTCTTATATATTAATGGAAAAACCTATTTGAATTGGTTATTACAGAGGCCAGGCCAGTCTCCAAAACGCCTAATCTATCTGGTGTCTAAATTGGACTCTGGAGTCCCTAACAGATTCAGTGGCAGTGGATCAGGGACAGATTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATTTGGGAGTTTATTACTGCTTGCAGAGTACACATTTTCTCAGACGTTCCGGTGGAGGCACCAAGCTGGAAATCAAAA
849.5C2	865	GATATTGTGATGACTCAGGCTGCACCCTCTGTACCTGTCACTCCTGGAGAGTCAGTATCCATCTCCTGCAGGTTAGTAGGAGTCTCCTGCATAGTAATGGCTACACTTACTGTATTGGTTCTGCAGAGGCCAGGCCAGTCTCCTCGGCTCCTGATATATCGGATGTCCAACCTTGCTCAGGAGTCCAGACAGGTTCAAGTGGCAGTGGGTCAGGAAGCTGCTTTCACACTGAGAATCAGTAGAGTGGAGGCTGAGGATGTGGGTGTTTATTACTGTATGCAACATCTAGAATATCCGTACACGTTCCGGAGGGGGGACCAAGCTGGAAATAAAA
849.8D12	866	GACATCCAGATGACACAGACTACATCCTCCCTGTCTGCCTCTCTGGGAGACAGAGTCACCATCAGTTGCAGTGCAAGTCAGGGCATTAGCAATTATTTAAACTGGTATCAGCAGAAACCAGATGGAAGTGTAAACTCCTGATCTATTACACATCAAGTTTACACTCAGGAGTCCCATCAAGGTTCAAGTGGCAGTGGGTCTGGGACAGATTATTCTCTCACATCAGCAACCTGGAACCTGAAGATATTGCCACTTACTATTGTCAGCAGTATAGTAAGCTTCCCTCGGACGTTCCGGTGGAGGCACCAAGCTGGAAATC
F847C.21H6	867	GATGTTGTGATGACCCAGACTCCACTCACTTTGTCTGGTTACCATTTGGACAACCAGCTCCATCTCTTGCAAGTCAAGTCGGAGCCTCTTAGATAGTGATGGAAAAACATATTTGAATTGGTTGTTACAGAGGCCAGGCCAGTCTCCAAAAGCGCCTAATCTATCTGGTGTCCAAACTGGACTCTGGAGTCCCTGACAGGTTCACTGGCAGTGGATCAGGGACAGATTTACACTGAAAATCAGCAGAGTGGAGGCTGAGGATTTGGGAGTTTATTATTGCTGGCAAGGTACACATTTTCTCAGACGTTCCGGTGGAGGCACCAAGCTGGAAATCAAT

FIG. 38 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
TB001 (IMT001-4)	318	CAGGTGCAGCTGGTGCAGTCCGGCTCCGAGCTGAAAAACCCGGCGCCTCCGTGA AAGTGTCTGCAAAGCCTCCGGCTACACATTACAAACTACGGCATGAACTGGGTG AGGCAGGCCCCCGGCCAGGGCTGAAATGGATGGGCTGGATCAACACAAACACAG GCGAGCCACATACGTGGAGGAGTTCACAGGCAGGTTCTGTCTTCCCTGGAGACA TCCGTGTCCACAGCCTACCTGCAGATCTCCTCCCTGAAAGCCGAGGACACAGCCGT GTACTTCTGCGCCCCCTACGACAACTTCTTCGCCTACTGGGGCCAGGGCACAACAG TGACAGTGTCTCCGCTTCCACCAAGGGACCCAGCGTGTTCCTCTGGCTCCTTGCT CCAGATCCACCTCCGAGTCTACAGCTGCTCTGGGCTGCCTGGTCAAGGACTACTTT CCTGAGCCTGTGACCGTGTCTTGGAACTCTGGCGCTCTGACATCTGGCGTGCACAC CTTTCAGCTGTGCTGCAGTCTCCTCCGGCTGTACTCTCTGTCTCTGTCTGACCGT GCCTTCTCTAGCCTGGGCACCAAGACCTACACCTGTAATGTGGACCACAAGCCTT CCAACACCAAGGTGGACAAGCGCGTGGAATCTAAGTACGGCCCTCCTTGTCTCTCA TGTCTGTCTCCAGAGTTTCTCGGCGGACCCCTCCGTGTTCTGTTCCTCCAAAGCCT AAGGACACCCTGATGATCTCTCGGACCCCTGAAGTGACCTGCGTGGTGGTGGATGT GTCCCAAGAGGATCCCGAGGTGCAGTTCAATTGGTACGTGGACGGCGTGGAAGTG CACAACGCCAAGACCAAGCCTAGAGAGGAACAGTTCAACTCCACCTACAGAGTGG TGTCCGTGCTGACCGTGTCTGCACCAGGATTGGCTGAACGGCAAAGAGTACAAGTG CAAGGTGTCCAACAAGGGCCTGCCTTCCAGCATCGAAAAGACCATCTCCAAGGCC AAGGGCCAGCCTAGGGAACCCAGGTTTACACCCTGCCTCCAAGCCAAGAGGAAA TGACCAAGAACCAGGTGTCCCTGACCTGCCTCGTGAAGGGCTTCTACCTTCCGAT ATCGCCGTGGAATGGGAGAGCAATGGCCAGCCTGAGAACAACCTACAAGACAACCC CTCCTGTGCTGGACTCCGACGGCAGCTTCTTCTGTATTCCCGCTGACCGTGGACA AGTCCAGATGGCAAGAGGGCAACGTGTTCACTGCTCCGTGATGCACGAGGCCCT GCACAATCACTACACCCAGAAGTCCCTGTCTCTGTCCCTGGGCTGATGA
TB006 (4A11.H3L1)	319	CAGATTCAATTGGTTCAGAGCGGCTCAGAACTGAAAAAGCCTGGAGCCAGCGTTA AAGTGAGCTGTAAAGCCAGTGGATACACATTACCACTTACGTATGTCTGGGTT AGACAGGCCCCCTGGACAGGGGCTGGAATGGATGGGCTGGATAAACTCACTCTG GAGTGCCACATACGCGGACGACTTACAGGCAGGTTCTGTGTTTTCCCTAGATACT AGTGTGAATACTGCATACTTGCAAACTCTTCTCTGAAAGCAGAGGATACCGCCGT GTACTTTTGACCCGCGATGGGAATGATGGGGATGCCATGGACAACCTGGGGCCAG GGGACGACTGTGACAGTGTCTTACAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCT CGCTCCCTGCAGCCGGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGA AGGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCC GGCGTCCACACATTCCTCGCTGTCTGACAGAGCAGCGCCTGTACAGCCTGAGCTC CGTGGTCAACCGTGCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTG GACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGAC CCCCCTGTCTCTTGGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCTGTT TCCCCCAAGCCCAAGGACACCCCTGATGATCTCCCGGACACCCGAAGTCACCTGCG TCGTGGTGGATGTGAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGA CGGAGTGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGC ACCTATCGGGTCTGTCTCGTGTCTACCGTCTCTGCATCAGGATTGGCTCAACGGCAA GGAGTACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCTCCATCGAGAAGACC ATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAG CCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATT TACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAAC ACAAGACCACACCCCCGTGCTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGG CTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTCACTGCTCCTGTGA TGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGC TAGTAA

FIG. 39

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Antibody	SEQ ID NO:	HC nucleic acid sequence
12G5.D7	320	CAGGTGCAGCTGAAGCAGTCTGGGGCTGAGCTGGTGAGGCCTGGGGCTTCAGTGA AGCTGTCTTGCAAGGCTTCTGGCTACACTTTCAGTACTACTATATAAACTGGGTG AAGCAGAGGCCTGGACAGGGACTTGAGTGGATTGCAAGGATTTATCCTGGAAGTGA GTAATACTGACTACAATGAGAAGTTCAAGGGCAGGGCCACACTGACTGCAGAAAA CTCCTCCAGCACTGCCTACATGCAGCTCAGCAGTCTGACATCTGAGGACTCTGCTG TCTATTTCTGTGCAAGATTTGCGTATTACTACGGTAGTGGAGGGTACTTTGACTACT GGGGCCACGGCACCCTCTCACAGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTG TTTCTCTCGCTCCCTGCAGCCGGAGCACATCCGAGAGCACCGTGCTCTGGGCTG TCTCGTGAAGGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCC TGACATCCGGCGTCCACACATTCCCCGCTGTCTGCAGAGCAGCGGCCTGTACAGC CTGAGCTCCGTGGTCACCGTGCTAGCAGCAGCCTGGGAACAAAGACCTACACCTG CAACGTGGACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAATCCAAG TATGGACCCCCCTGTCTCCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTC TTCTGTTCCTCCCAAGCCCAAGGACACCCCTGATGATCTCCCGGACACCCGAAGT CACCTGCGTCTGTGGTGGATGTACGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGT ACGTGGACGGAGTGGAGGTGCATAACGCCAAAAACCAAGCCCAGGGAAGAGCAGTT CAACAGCACCTATCGGGTCTGTCTCGTGTACCGTCTGCATCAGGATTGGCTCA ACGGCAAGGAGTACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGA GAAGACCATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTC CCTCCAGCCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGA AGGGATTTTACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGA GAACAACACTACAAGACCACACCCCCCGTGTGACTCCGATGGCTCCTTCTTCTGT ACAGCAGGCTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTG CTCCGTGATGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGA GCCTCGGCTAGTAA
13A12.2E5	321	CAGATCCAGTTGGTACAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGACTTCTGGGTATAAATTCAAAACCTATGTGATGAGCTGGGTG AAACAGGCTCCAGGAAAGGCTTTAAAGTGGATGGGCTGGATAAAACCTACTCTG GAGTGCCAACATATGCTGATGACTTCAAGGGACGATTTGCCTTCTCTTTGGAAACC TCTGCCAGCACTGCCTATTTGGAGATCATCAACCTCAAAAATGAGGACACGGCTAC ATATTTCTGTGCAAGAGATGGTAACACGGGGATCCTATGGACTACTGGGGTCAAG GAACCTCAGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTTCCTCTC GCTCCCTGCAGCCGGAGCACATCCGAGAGCACCGTGCTCTGGGCTGTCTCGTGAA GGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCG GCGTCCACACATTCCCCGCTGTCTGCAGAGCAGCGGCCTGTACAGCCTGAGCTCC GTGGTCACCGTGCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGG ACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAATCCAAGTATGGACC CCCCTGTCTCCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCCTTCTGTTT CCCCCAAGCCCAAGGACACCCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGT CGTGGTGGATGTACGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGAC GGAGTGGAGGTGCATAACGCCAAAAACCAAGCCCAGGGAAGAGCAGTTCAACAGC ACCTATCGGGTCTGTCTCGTGTACCGTCTGCATCAGGATTGGCTCAACGGCAA GGAGTACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACC ATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCAG CCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTT TACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAAC ACAAGACCACACCCCCCGTGTGACTCCGATGGCTCCTTCTTCTGTACAGCAGG CTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGA TGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGC TAGTAA

FIG. 39 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
14H10.2C9 (14H10)	322	CAGATCCAGTTGGTACAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACCTATGGAATGGGCTGGGTG AAACAGGCTCCAGGAAAGGATTTAAAGTGGATGGGCTGGATAAACACCTACTCTG GAGTGCCAACATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTTTGGAAACC TCTGCCAGCACTGCCTATTTGCAGATCAGCAACCTCAAAAATGAAGACACGGCTAC ATATTTCTGTTCAACCCCTTATGAATACGACGGGGCTTACTGGGGCCAGGGGACTC TGGTCACTGTCTCTGCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCT GCAGCCGGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTA CTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCC ACACATTCCCCGCTGTCTGCAGAGCAGCGGCCTGTACAGCCTGAGCTCCGTGGTC ACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATA AGCCCTCCAACACCAAGGTGGACAAGCGGGTGAATCCAAGTATGGACCCCTCTG TCCTCCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCCTGTTTCCCCC AAGCCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACTGCGTCTGGT GGATGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTG GAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGCACCTATC GGGTCGTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTAC AAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAA GGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAG GAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTC CGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACCTACAAGACC ACACCCCCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGT GGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCACTGCTCCGTGATGCACGAG GCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA
15F10.2D6 (15F10)	323	GAAGTACAGCTGGTGGAGTCTGGGGGAGGCTTAGTGAAGCCTGGAGGGTCCCTGA AACTCTCCTGTGCAGCCTCTGGATTCTGCTTTCAGTTTCTATGCCATGTCTTGGGTTT GCCAGACTCCGGAAAAGAGGCTGGAGTGGGTGCGAACCATTAGTGATGGTGGTGT TTACACCTACTATACAGACCATGTAAAGGGCCGATTACCATCTCCAGAGACAATG CCGAGGACAACCTGTACCTGCAAATGAGCCATCTGAAGTCTGAGGACACAGCCAT GTATTATTGTGTGAGAGATGGGGGCTACTGGGGCCAAGGCACCACTCTCACAGTCT CCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTGCAGCCGGAGC ACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACTTCCCTGAACC CGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACACATTCCCCG CTGTCTGTCAGAGCAGCGGCCTGTACAGCCTGAGCTCCGTGGTCAACCGTGCCTAGC AGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCCCTCCAACA CCAAGGTGGACAAGCGGGTGAATCCAAGTATGGACCCCTGTCTCCTTGCCCT GCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCTGTTTCCCCCAAGCCCAAGGAC ACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCTGGTGGATGTCAGCCA GGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAGGTGCATAAC GCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGCACCTATCGGGTCTGTGTCG TGCTACCGTCTGTCATCAGGATTGGCTCAACGGCAAGGAGTACAAGTGCAAGGT GTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGCTAAGGGCC AACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAGATGACCAA GAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTCCGACATCGCTG TGGAATGGGAAAGCAATGGCCAACCTGAGAACAACCTACAAGACCACACCCCCCGT GCTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGACAAATCCC GGTGGCAAGAGGGAAACGTGTTTCACTGCTCCGTGATGCACGAGGCTCTCCACAA CCTACTACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA

FIG. 39 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
19B5.2E6 (19B5)	324	CAGATCCAACCTTGTTTCAGAGCGGGCCCTGAATTGAAGAAACCAGGCGAGACTGTAA AGATCTCCTGTAAAGGCCAGTGGCTATACATTACCACCTACGCAATGAGCTGGGTC AAGCAGGCACCCGAAAGGGTCTGAAGTGGATGGGTGGATAAATACATACTCAG GCGTCCCAACCTACGCTGATGATTTGAAGGGGCGCTTTGCCTTTTCTCTTGAAACCT CAGCATCAACCGCCTACTTGCAGATAAATAACCTCAAAAATGAAGACACCGCTAC CTATTTCTGCGCAAGGGGGCCTTATGCTATGGACTACTGGGGCCAGGGCACCTCTG TGACTGTAAGTTCTGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTGCA GCCGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACTTC CCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACAC ATTCCCCGCTGTCTGTCAGAGCAGCGGCCCTGTACAGCCTGAGCTCCGTGGTCACCG TGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCC CTCCAACACCAAGGTGGACAAGCGGGTGAATCCAAGTATGGACCCCCCTGTCTCTC CTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCTGTGTTCCCCCAAGC CCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCGTGGTGGAT GTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGAGAGG TGCATAACGCCAAAACCAAGCCCAGGGAAGAGCAGTTCAACAGCACCTATCGGGT CGTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTACAAGT GCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGCT AAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAGA TGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTACCCCTCCGAC ATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAATCAAGACCCACAC CCCCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGAC AAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGATGCACGAGGCTC TCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA
20D11.2C6 (20D11)	325	GAGGTCCAGCTGCAACAATCTGGACCTGAACCTGGTGAAGCCTGGGGCTTCAGTGA AGATATCCTGTAAAGCTTCTGGATACACGTTCACTGACTTCTACATAAACTGGGTG AAGCAGAGCCATGGAAAGAGCCTTGAGTGGATTGGAGATATTAATCCTAAGAATG GTGGTATTAATACTACAACCCGAAGTTCAAGATCAAGGCCACATTGACTGTAGACAA GTCCTCCAGCACATCCTACATGGACCTCCGCGGCCCTGACATCTGAGGACTCTGCAG TCTATTACTGCACCTCAGGCTACGGATTTCTTACTGGGGCCAAGGGACTCTGGTC ACTGTCTCTGCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTGCAG CCGGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACTTCC CTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACACA TTCCCCGCTGTCTCTGCAGAGCAGCGGCCCTGTACAGCCTGAGCTCCGTGGTCAACGT GCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCCC TCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGACCCCCCTGTCTCTC TTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCTGTGTTCCCCCAAGCC CAAGGACACCCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCGTGGTGGATG TCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAGGT GCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGCACCTATCGGGTC GTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTACAAGTG CAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGCTA AGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAGAT GACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTCCGACA TCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAATAACAAGACCACACC CCCCGTGCTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGACA AATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGATGCACGAGGCTCTC CACCAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA

FIG. 39 cont.

110/185

Antibody	SEQ ID NO:	HC nucleic acid sequence
20H5.A3 (20H5)	326	CAGATCCAGTTGGTACAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGTCAGTCA AGATCTCCTGCAAGGCTTCTGGTTATGCCTTCACAACCTATGGAATGAGCTGGGTG CAACAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGGTAAACACCTACTCTG GAGTGCCAAACATGTGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTTTGGAAACC TCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAGAAAATGAGGACACGGCTAC ATATTTCTGTGCAAGAGGGCCCTATGCTATGGACTACTGGGGTCAAGGAACCTCAG TCACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTGCA GCCGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACTTC CCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACAC ATTCCCCGCTGTCTGTCAGAGCAGCGGCCTGTACAGCCTGAGCTCCGTGGTCACCG TGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCC CTCCAACACCAAGGTGGACAAGCGGGTGAATCCAAGTATGGACCCCCCTGTCTC CTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCTGTGTTCCCCCAAGC CCAAGGACACCCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCGTGGTGGAT GTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAGG TGCATAACGCCAAAACCAAGCCCAGGGAAGAGCAGTTCAACAGCACCTATCGGGT CGTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTACAAGT GCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGCT AAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAGA TGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTACCCCTCCGAC ATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACACAGACCACAC CCCCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGAC AAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGATGCACGAGGCTC TCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA
23H9.2E4 (23H9)	327	CAGATCCAGTTGGTACAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACCTATGCAATGAGCTGGGTG AAACAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCTACTCTG GAGTGCCAAACATATGCTGATGACCTCAAGGGACGGTTTGCCTTCTCTTTGGAAACC TCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGGACACGGCTAC ATATTTCTGTGCAAGAGGGCCCTATGCTATGGACTACTGGGGTCAAGGAACCTCAG TCACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTGCA GCCGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACTTC CCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACAC ATTCCCCGCTGTCTGTCAGAGCAGCGGCCTGTACAGCCTGAGCTCCGTGGTCACCG TGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCC CTCCAACACCAAGGTGGACAAGCGGGTGAATCCAAGTATGGACCCCCCTGTCTC CTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCTGTGTTCCCCCAAGC CCAAGGACACCCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCGTGGTGGAT GTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAGG TGCATAACGCCAAAACCAAGCCCAGGGAAGAGCAGTTCAACAGCACCTATCGGGT CGTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTACAAGT GCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGCT AAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAGA TGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTACCCCTCCGAC ATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACACAGACCACAC CCCCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGAC AAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGATGCACGAGGCTC TCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA

FIG. 39 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
2D10.2B2 (2D10)	328	CAAGTACAGCTCCAGCAATCAGGACCTGAACTTGTTAAGCCAGGTGCAAGCGTCA AAATAAGTTGTAAAGCATCAGGTTACACCTTTACAGACTACTATATCAACTGGGTC AAGCAACGGCCTGGTCAGGGACTTGAATGGATAGGTTGGATCTACCCTGGGTAC AAGACACCAAGTACAATGAAAAATTTAAGGGGAAAGCCACTCTGACAGTAGATAC TAGCTCAAGTACCGCTACATGCAGCTCGGCAGCCTCACTTCCGAGGACTCTGCCG TATATTTCTGTGCCAACTACTTCGGGTCTTCTGGGTGGTTCTTTGATGTGTGGGGAA CCGGCACCACCGTAACCGTTTCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCT CTCGTCCCTGCAGCCGGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGT GAAGGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACAT CCGGCGTCCACACATTCCCCGCTGTCTGCAGAGCAGCGGCCTGTACAGCCTGAGC TCCGTGGTCACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGT GGACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAAGTATGGA CCCCCTGTCTCCTTGGCCCTGCTCTCTGAATTTCTCGGAGGCCCCCTCCGTCTTCCTGT TTCCCCCAAGCCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGC GTCGTGGTGGATGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGG ACGGAGTGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACA GCACCTATCGGGTCGTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGC AAGGAGTACAAGTGCAAGGTGTCCAACAAGGGCTTGCCTCTCCATCGAGAAGA CCATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCC AGCCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGAT TTTACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACA CTACAAGACCACACCCCCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCA GGCTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGT GATGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCG GCTAGTAA
3B11.2G2 (3B11)	329	CAGATCCAGTTGGTACAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGACTTCTGGGTATAAATTCAAAACCTATGTAATGAGCTGGGTG AAACAGGCTCCAGGAAAGGCTTTAAAGTGGATGGGCTGGATAAACACCTACTCTG GAGTGCCAACATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTTTGGAAACC TCTGCCAGCACTGCCTATTTGGAGATCATCAACCTCAAAAATGAGGACACGGCTAC ATATTTCTGTGCAAGAGATGGTAATTACGGGGATCCTATGGACTACTGGGGTCAAG GAACCTCAGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTC GCTCCCTGCAGCCGGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAA GGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCG GCGTCCACACATTCCCCGCTGTCTGCAGAGCAGCGGCCTGTACAGCCTGAGCTCC GTGGTCACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGG ACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAAGTATGGACC CCCCTGTCTCCTTGGCCCTGCTCTCTGAATTTCTCGGAGGCCCCCTCCGTCTTCCTGTTT CCCCCAAGCCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGT CGTGGTGGATGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGAC GGAGTGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGC ACCTATCGGGTCGTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAA GGAGTACAAGTGCAAGGTGTCCAACAAGGGCTTGCCTCTCCATCGAGAAGACC ATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAG CCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTT TACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACA ACAAGACCACACCCCCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGG CTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGA TGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGG TAGTAA

FIG. 39 cont.

Antibody	SEQ ID NO:	HC nucleic acid sequence
7D8.2D8 (7D8)	330	GAAGTGCAGCTGGTGGAGTCTGGGGGAGGCTTAGTGAAGCCTGGAGGGTCCCTGA AACTCTCCTGTGCAGCCTCTGGATTACATTTACAGTAGCTATGCCATGTCTTGGGTTTC GCCAGACTCCGGAAAGAGGGCTGGAGTGGGTGCGAACCATCAGTGTAGTGGTAT TTACACCTACTATCCAGACAATGTAAAGGGCCGATTACCATTTCCAGAGACAATG CCAAGAACAACCTGTTCTCTGCAAATGAGCCATCTGAAGTCTGAGGATACAGCCATG TATTACTGTGTAAAGAGATGGGGGCTACTGGGGCCAAGGCACCACTCTCACAGTCTC CTCAGCTAGCACCAAGGGCCCCAGCGTGTTTCTCTCGCTCCCTGCAGCCGGAGCA CATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACTTCCCTGAACCC GTCACCGTCAGCTGGAATAGCGGGCGCCTGACATCCGCGCTCCACACATTCCCCGC TGCTCTGCAGAGCAGCGGCTGTACAGCCTGAGCTCCGTGGTACCGTGCCTAGCA GCGACCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCCCTCCAACAC CAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGACCCCCCTGTCTCTCTTGCCCTG CTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCTGTCTTCCCCCAAGCCCAAGGACA CCCTGATGATCTCCCGACACCCGAAGTACCTGCGTCTGTGGTGGATGTCAGCCAG GAAGATCCCAGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAGGTGCATAACG CCAAACCAAGCCCAGGGAAGAGCAGTTCAACAGCACCTATCGGGTCGTGTCCGT GCTACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTACAAGTCAAGGTG TCCAACAAGGGCCTGCCCTCTCCATCGAGAAGACCATCTCCAAGGCTAAGGGCCA ACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAGATGACCAAG AATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTCCGACATCGCTGT GGAATGGGAAAGCAATGGCCAACCTGAGAACAACCTACAAGACCACACCCCCCGTG CTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGACAAATCCCG GTGGCAAGAGGGGAACGTGTTACGCTGCTCCGTGATGCACGAGGCTCTCCACAAC CACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA
F846C.1B2	331	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACTATGGAATGAATTGGGTG AAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCTACACTG GAGAGCCATCATATGCTGATGACTTCAAGGGACGGTTTGCTTCTCTTTGGAAACC TCTGCCAGCAGTGCCTATTTGCAGATCAACAACCTCAAAATGAGGACATGGCTAC ATATTTCTGTGCAAGATGGGGGGTTACGTGGGGTACTACTGATGCTATGGACTCT GGGGTCAAGGAACCTCAGTCACCGTCTCTCAGCTAGCACCAAGGGCCCCAGCGT GTTTCTCTCTCGTCCCTGCAGCCGGAGCACATCCGAGAGCACCGCTGCTCTGGGT GTCTCGTGAAGGACTACTTCCCTGAACCCGTACCGTCAGCTGGAATAGCGGCGCC CTGACATCCGGCGTCCACACATTCCCCGCTGTCTTGACAGAGCAGCGGCTGTACAG CCTGAGTCTCCGTGGTCAACCGTGCCTAGCAGCAGCTGGGAACAAAGACCTACACCT GCAACGTGGACGATAAGCCCTCCAACCAAGGTGGACAAGCGGGTGAATCCAA GTATGGACCCCCCTGTCTCTCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGT CTTCTGTCTTCCCCCAAGCCCAAGGACACCCCTGATGATCTCCCGACACCCGAAG TCACCTGCGTCTGTGGTGGATGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGG TACGTGGACGGAGTGGAGGTGCATAACGCCAAAACCAAGCCCAGGGAAGAGCAGT TCAACAGCACCTATCGGGTCGTGTCCGTGCTACCCGTCTGCATCAGGATTGGCTC AACGGCAAGGAGTACAAGTGCAAGGTGTCCAACAAGGGGCTGCCCTCTCTCCATCG AGAAGACCATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCT CCCTCCCAGCCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTG AAGGGATTTTACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTG AGAACAACCTACAAGACCACACCCCCCGTGCTGGACTCCGATGGCTCCTTCTTCTG TACAGCAGGCTGACCGTGGACAAATCCCGGTGGCAAGAGGGGAACGTGTTACAGT GCTCCGTGATGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTG AGCCTCGGCTAGTAA

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Antibody	SEQ ID NO:	HC nucleic acid sequence
F846C.1F5 (846.1F5)	332	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAAACTATGGAATGAACTGGGTG AAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCTACACTG GAGAGCCATCATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTTTGGAAACC TCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAAATGAGGACATGGCTAC ATATTTCTGTGCAAGATGGGGGGGTACGATGGGGATTACTATGCTATGGACTACT GGGGTCAAGGAACCTCAGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGT GTTTCCTCTCGCTCCCTGCAGCCGGAGCACATCCGAGAGCACCGTGTCTCTGGGT GTCTCGTGAAGGACTACTTCCCTGAACCCGTACCGTCAGCTGGAATAGCGGCGCC CTGACATCCGGCGTCCACACATTCCCCGCTGTCTGCAGAGCAGCGGCCTGTACAG CCTGAGCTCCGTGGTCAACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCT GCAACGTGGACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAA GTATGGACCCCCCTGTCTCCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGT CTTCTGTCTTCCCCCAAGCCCAAGGACACCCCTGATGATCTCCCGACACCCGAAG TCACCTGCGTCTGTGGTGGATGTCAAGCAGGAAGATCCCGAGGTGCAGTTCAACTGG TACGTGGACGGAGTGGAGGTGCATAACGCCAAAAACCAAGCCCAGGGAAGAGCAGT TCAACAGCACCTATCGGGTCTGTTCCTGTCTACCGTCTGCATCAGGATTGGCTC AACGGCAAGGAGTACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCG AGAAGACCATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCT CCCTCCCAGCCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTG AAGGGATTTTACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTG AGAACAACCTACAAGACCACACCCCCGCTGTGGACTCCGATGGCTCCTTCTCCTG TACAGCAGGCTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCT GCTCCGTGATGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTG AGCCTCGGCTAGTAA
F846C.1H12 (846.1H12)	333	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAAACTTTGGAATGAACTGGGTG AAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCTACACTG GAGAGCCATCATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTTTGGAAACC TCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAAATGAGGACATTGCTAC ATATTTCTGTGCAAGATGGGGGGGTACGCTGGGGATTACTATGCTATGGACTACT GGGGTCAAGGAACCTCAGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGT GTTTCCTCTCGCTCCCTGCAGCCGGAGCACATCCGAGAGCACCGTGTCTCTGGGT GTCTCGTGAAGGACTACTTCCCTGAACCCGTACCGTCAGCTGGAATAGCGGCGCC CTGACATCCGGCGTCCACACATTCCCCGCTGTCTGCAGAGCAGCGGCCTGTACAG CCTGAGCTCCGTGGTCAACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCT GCAACGTGGACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAA GTATGGACCCCCCTGTCTCCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGT CTTCTGTCTTCCCCCAAGCCCAAGGACACCCCTGATGATCTCCCGACACCCGAAG TCACCTGCGTCTGTGGTGGATGTCAAGCAGGAAGATCCCGAGGTGCAGTTCAACTGG TACGTGGACGGAGTGGAGGTGCATAACGCCAAAAACCAAGCCCAGGGAAGAGCAGT TCAACAGCACCTATCGGGTCTGTTCCTGTCTACCGTCTGCATCAGGATTGGCTC AACGGCAAGGAGTACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCG AGAAGACCATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCT CCCTCCCAGCCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTG AAGGGATTTTACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTG AGAACAACCTACAAGACCACACCCCCGCTGTGGACTCCGATGGCTCCTTCTCCTG TACAGCAGGCTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCT GCTCCGTGATGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTG AGCCTCGGCTAGTAA

FIG. 39 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
F846C.1H5 (846.1H5)	334	GAGGTCCAGCTGTTGGAGTCTGGGGGAGGCTTAGTGAAGCCTGGAGGGTCCCTGA AACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGCAGCTATGCCATGTCTTGGGTTC GCCAGACTCCAGAGAAGAGGCTGGAGTGGGTTCGCATCCATTAGTAGTGGTGGTGA CACCTACTATCCAGACAGTGTGAAGGGCCGATTACCATCTCTAGAGATAATGCCA GGAACATCCTGTACCTGCAAATGAGCAGTCTGAGGTCTGAGGACACGGCCATGTAT TACTGTGCAAGTTATGGTAACTCCCTCTTTGACTACTGGGGCCAAGGCACCACTCT CACAGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTGCA GCCGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACTTC CCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACAC ATTCCCCGCTGTCTGCAGAGCAGCGGCCCTGTACAGCCTGAGCTCCGTGGTCAACCG TGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCC CTCCAACACCAAGGTGGACAAGCGGGTGAATCCAAGTATGGACCCCCCTGTCTCTC CTTGCCCTGCTCCTGAATTTCTCGGAGGCCCTCCGTCTTCTGTTCCTGTTTCCCCCAAGC CCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCGTGGTGGAT GTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAGG TGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGCACCTATCGGGT CGTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTACAAGT GCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGCT AAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAGA TGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTACCCCTCCGAC ATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACCTACAAGACCACAC CCCCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGAC AAATCCCGGTGGCAAGAGGGAAACGTGTTTCACTGCTCCGTGATGCACGAGGCTC TCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA
F846C.2H3 (846.2H3)	335	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACTATGGAATGAACTGGGTG AAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAACACCTACACTG GAGAGCCATCATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTTTGGAAACC TCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAAATGAGGACATGGCTAC ATATTTCTGTGCAAGATGGGGGGGTACGATGGGGATTACTATGCTATGGACTACT GGGGTCAAGGAACCTCAGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGT GTTTCCTCTCGCTCCCTGCAGCCGAGCACATCCGAGAGCACCGCTGCTCTGGGCT GTCTCGTGAAGGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCC CTGACATCCGGCGTCCACACATTCCTCCGCTGTCTGCAGAGCAGCGCCTGTACAG CCTGAGCTCCGTGGTCAACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCT GCAACGTGGACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAA GTATGGACCCCCCTGTCTCCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCTCCGT CTTCTGTTCCTCCCCCAAGCCCAAGGACACCCCTGATGATCTCCCGGACACCCGAAG TCACCTGCGTCGTGGTGGATGTGAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGG TACGTGGACGGAGTGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGT TCAACAGCACCTATCGGGTCTGTGTCCTGCTCACCGTCTGTCATCAGGATTGGCTC AACGGCAAGGAGTACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCG AGAAGACCATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCT CCCTCCCAGCCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTG AAGGGATTTTACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTG AGAACAACCTACAAGACCACACCCCCCGTGTGACTCCGATGGCTCCTTCTTCTG TACAGCAGGCTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCACTG GCTCCGTGATGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTG AGCCTCGGCTAGTAA

FIG. 39 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
F846TC.14A2 (846T.14A2)	336	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACTATGGAATGAACTGGGTG AAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCTACACTG GAGAGCCAACATATGCTGGTGACCTCAAGGGACGGTTTGCCTTCTCTTTGGAAACC TCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAAATGAGGACACGGCTAC ATATTTCTGTGTAAGATATACTATGGACTACTGGGGTCAAGGAACCTCAGTCAACCG TCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTGCAGCCGG AGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACTTCCCTGA ACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACACATTCC CCGCTGTCTGCAGAGCAGCGGCCCTGTACAGCCTGAGCTCCGTGGTCACCGTGCCT AGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCCCTCCA ACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGACCCCCCTGTCTCTTGC CCTGCTCCTGAATTTCTCGAGGGCCCCCTCCGTCTTCTGTTCCTCCCCCAAGCCCAAG GACACCCTGATGATCTCCCGACACCCGAAGTCACCTGCGTCGTGGTGGATGTCAG CCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAGGTGCAT AACGCCAAAACCAAGCCCAGGGAAGAGCAGTTC AACAGCACCTATCGGGTCGTGT CCGTGCTCACCGTCTGTCATCAGGATTGGCTCAACGGCAAGGAGTACAAGTGCAA GGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGCTAAGG GCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCAGCCAGGAGGAGATGAC CAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTCCGACATCG CTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACCTACAAGACCACACCCCC CGTGCTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGACAAAT CCCGGTGGCAAGAGGGAAACGTGTTCACTGCTCCGTGATGCACGAGGCTCTCCAC AACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA
F846TC.14E4 (846T.14E4)	337	CAGGTACTCTGAAAGAGTCTGGCCCTGGGATATTGCAGCCCTCCAGACCCTCAG TCTGACTTGTCTTTCTCTGGGTFTTCACTGAGCACTTCTGGTATGGGTGTAGGCTG GATTGCTCAGCCTTCAGGGAAGGGTCTGGAGTGGCTGGCACACATTTGGTGGGATG ATGATAAGTACTATAACACAGCCCTGAAGAGCGGGCTACAATCTCCAAGGATGC CTCCAAAAACCAGGTCTTCCTCAAGATCGCCAGTATGGACACTGCAGATACTGCCA CATACTACTGTGCTCGAAACCTCTATGATGGTTCCTACGGGTACTATGCTATGGACT ACTGGGGTCAAGGAACCTCAGTACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGC GTGTTTCTCTCGCTCCCTGCAGCCGGAGCACATCCGAGAGCACCGCTGCTCTGGG CTGTCTCGTGAAGGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCG CCCTGACATCCGGCGTCCACACATTCCTCCGCTGTCTGTCAGAGCAGCGGCCTGTAC AGCCTGAGCTCCGTGGTACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACA CCTGCAACGTGGACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATC CAAGTATGGACCCCCCTGTCTCCTTGCCCTGCTCCTGAATTTCTCGAGGGCCCCCTC CGTCTTCTGTTCCTCCCCCAAGCCCAAGGACACCCCTGATGATCTCCCGGACACCCG AAGTCACCTGCGTCGTGGTGGATGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAA CTGGTACGTGGACGGAGTGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAG CAGTTCAACAGCACCTATCGGGTCGTGTCCGTGCTCACCGTCTGTCATCAGGATTG GCTCAACGGCAAGGAGTACAAGTGCAAGGTGTCCAACAAGGGCTGCCCTCTCC ATCGAGAAGACCATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATA CCCTCCCTCCCAGCCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTC GTGAAGGGATTTTACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAAC CTGAGAACAACCTACAAGACCACACCCCGTGTGGACTCCGATGGCTCCTTCTTC CTGTACAGCAGGCTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTCA GCTGCTCCGTGATGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCC CTGAGCCTCGGCTAGTAA

FIG. 39 cont.

116/185

Antibody	SEQ ID NO:	HC nucleic acid sequence
F846TC.16B5 (846T.16B5)	338	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACTATGGAATGAACTGGGTG AAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCTACACTG GAGAGCCAGCATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTTTGGAAACC TCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAAATGAGGACATGGCTAC ATATTTCTGTGCAAGATGGGGGGGTACGATGGGGATTACTATGCTATGGACTACT GGGGTCAAGGAACCTCAGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGT GTTTCCTCTCGTCCCTGCAGCCGGAGCACATCCGAGAGCACCGTGTCTCTGGGT GTCTCGTGAAGGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAAATAGCGGCGCC CTGACATCCGGCGTCCACACATTCCCCGCTGTCTGCAGAGCAGCGGCCTGTACAG CCTGAGCTCCGTGGTCAACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCT GCAACGTGGACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAA GTATGGACCCCCCTGTCTCCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGT CTTCTGTCTTCCCCCAAGCCCAAGGACACCCTGATGATCTCCCGACACCCGAAG TCACCTGCGTCTGTGGTGGATGTCAAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGG TACGTGGACGGAGTGGAGGTGCATAACGCCAAAAACCAAGCCCAGGGAAGAGCAGT TCAACAGCACCTATCGGGTCTGTTCCTGTCTACCGTCTGCATCAGGATTGGCTC AACGGCAAGGAGTACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCG AGAAGACCATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCT CCCTCCCAGCCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTG AAGGGATTTTACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTG AGAACAATAACAAGACCACACCCCCCGTGTCTGGACTCCGATGGCTCCTTCTCCTG TACAGCAGGCTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTACAGCT GCTCCGTGATGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTG AGCCTCGGCTAGTAA
F846TC.7F10 (846T.7F10)	339	GAAGTGCAGCTGGTGGAGTCTGGGGGAGACTTAGTGAAGCCTGGAGGGTCCCTGA AACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTAACTATGGCTTGTCTTGGATT GCCAGACTCCAGACAAGAGGCTGGAGTGGGTGCGCAACCATTAGTAGTGGTGGTAG TTACACCTACTATCCTGACAGTGTGAAGGGGCGATTACCATCTCCAGAGACAGTG CCAAGAACACCCTGTACCTGCAAATGAGCAGTCTGAAGTCTGAGGACACAGCCAT GTATTACTGTGCAAGACATGCGCATTAACGCTGTAGCCCGTACTACTTTGACT ACTGGGGCCAAGGCACCTGTCTCACAGTCTCCTCAGCTAGCACCAAGGGCCCCAGC GTGTTTCTCTCGTCCCTGCAGCCGGAGCACATCCGAGAGCACCGTGTCTCTGGG CTGTCTCGTGAAGGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCG CCCTGACATCCGGCGTCCACACATTCCCCGCTGTCTGCAGAGCAGCGGCCTGTAC AGCCTGAGCTCCGTGGTCAACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACA CCTGCAACGTGGACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATC CAAGTATGGACCCCCCTGTCTCCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTC CGTCTTCTGTCTTCCCCCAAGCCCAAGGACACCCTGATGATCTCCCGACACCCG AAGTCACCTGCGTCTGTGGTGGATGTCAAGCCAGGAAGATCCCGAGGTGCAGTTCAA CTGGTACGTGGACGGAGTGGAGGTGCATAACGCCAAAAACCAAGCCCAGGGAAGAG CAGTTCAACAGCACCTATCGGGTCTGTTCCTGTCTACCGTCTGCATCAGGATTG GCTCAACGGCAAGGAGTACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCC ATCGAGAAGACCATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATA CCCTCCCTCCCAGCCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTC GTGAAGGGATTTTACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAAC CTGAGAACAATAACAAGACCACACCCCCCGTGTCTGGACTCCGATGGCTCCTTCTTC CTGTACAGCAGGCTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTCA GCTGCTCCGTGATGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCC CTGAGCCTCGGCTAGTAA

FIG. 39 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
F847C.10B9 (847.10B9)	340	CAGATCCAGTTGGTGCACTCTGGACCTGAGGTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGGCTTCTGGGTATATCTTCACAACTATGGAATGAACCTGGGTG AAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCTACACTG GAGAGCCAACATATACTGATGACTTCAAGGGACGGTTTGCCTTCTCTTTGGAAACC TCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGGACACGGCTAC ATATTTCTGTGCAAAGTTTGGTAACTACGTGGGAGCTATGGACTACTGGGGTCAAG GAACCTCAGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTC GCTCCCTGCAGCCGGAGCACATCCGAGAGCACCCTGCTCTGGGCTGCTCTCGTGAA GGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAAATAGCGGCGCCCTGACATCCG GCGTCCACACATTCCCCGCTGTCTGCAGAGCAGCGGCCTGTACAGCCTGAGCTCC GTGGTCACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGG ACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGACC CCCCTGTCTCCTTGCCCTGCTCTGAAATTTCTCGGAGGCCCCCTCCGTCTTCCTGTTT CCCCCAAGCCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGT CGTGGTGGATGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGAC GGAGTGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGC ACCTATCGGGTCGTGTCCGTGCTCACCCTCCTGCATCAGGATTGGCTCAACGGCAA GGAGTACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACC ATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAG CCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATT TACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAAC ACAAGACCACACCCCCCGTGTCTGGACTCCGATGGCTCCTTCTTCCTGTACAGCAGG CTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGA TGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGC TAGTAA
F847C.11B1 (847.11B1)	341	GAGGTCCAGCTTCAGCAGTCTGGACCTGAGCTGGTGAAACCTGGGGCCTCAGTGA AGATATCCTGCAAGGCTTCTGGAAACACATTCACTGACCACAACATGCACCTGGGTG AAGCAGAGCCATGGAAAGAGCCTTGAGTGGATTGGATATATTTATCCTTACAATGG TGGTACTGGCTACAACCAGAAGTTCAAGAGCAAGGCCACATTGACTGTAGACAAT TCCTCCAGCACAGTCTACATGGAGCTCCGACGCTGACATCTGAGGACTCTGCAGT CTATTACTGTGCAAGAGGGGAGTATGATTACCTGGCCTGGTTTGCTTACTGGGGCC AAGGGACTCTGGTCACTGTCTCTGCAGCTAGCACCAAGGGCCCCAGCGTGTTCCT CTCGTCCCTGCAGCCGGAGCACATCCGAGAGCACCCTGCTCTGGGCTGTCTCGT GAAGGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACAT CCGGCGTCCACACATTCCCCGCTGTCTGCAGAGCAGCGGCCTGTACAGCCTGAGC TCCGTGGTCACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGT GGACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGA CCCCCTGTCTCCTTGCCCTGCTCTGAAATTTCTCGGAGGCCCCCTCCGTCTTCCTGT TTCCCCCAAGCCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGC GTCGTGGTGGATGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGG ACGGAGTGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACA GCACCTATCGGGTCGTGTCCGTGCTCACCCTCCTGCATCAGGATTGGCTCAACGGC AAGGAGTACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGA CCATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCC AGCCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGAT TTTACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACA CTACAAGACCACACCCCCCGTGTCTGGACTCCGATGGCTCCTTCTTCCTGTACAGCA GGCTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGT GATGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCG GCTAGTAA

FIG. 39 cont.

118/185

Antibody	SEQ ID NO:	HC nucleic acid sequence
F847C.12F12 (847.12F12)	342	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACTATGGAATGAACTGGGTG AAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCTACACTG GAGAGCCAACATATGTTGATGACTTCAAGGGACGGTTTGCCTTCTCTTTGGAAACC TCTGCCAGCACTGCCTATTTGCGGATCAACAACCTCAAAAAATGAGGACACGGCTAC ATATTTCTGTGCAAAGTTTGGTAACTACGTGGGAGCTATGGACTACTGGGGTCAAG GAACCTCAGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTC GCTCCCTGCAGCCGGAGCACATCCGAGAGCACCCTGCTCTGGGCTGTCTCGTGAA GGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCG GCGTCCACACATTCCCCGCTGTCCTGCAGAGCAGCGGCCTGTACAGCCTGAGCTCC GTGGTCACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGG ACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGACC CCCCTGTCTCCTTGCCCTGCTCTGAAATTTCTCGGAGGCCCCCTCCGTCTTCCTGTTT CCCCCAAGCCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGT CGTGGTGGATGTGAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGAC GGAGTGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGC ACCTATCGGGTCGTGTCCGTGCTCACCCTCCTGCATCAGGATTGGCTCAACGGCAA GGAGTACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACC ATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAG CCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATT TACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAAC ACAAGACCACACCCCCGCTGCTGGACTCCGATGGCTCCTTCTTCCTGTACAGCAGG CTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGA TGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGC TAGTAA
F847C.26F5 (847.26F5)	343	CAGATCCAGTTGGTGCAGTCTGGACCTGAGGTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGGCTTCTGGGTATATCTTCACAACTATGGAATGAACTGGGTG AAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCTACACTG GAGAGCCAACATATACTGATGACTTCAAGGGACGGTTTGCCTTCTCTTTGGAAACC TCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAAATGAGGACACGGCTAC ATATTTCTGTGCAAAGTTTGGTAACTACGTGGGAGCTATGGACTACTGGGGTCAAG GAACCTCAGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTC GCTCCCTGCAGCCGGAGCACATCCGAGAGCACCCTGCTCTGGGCTGTCTCGTGAA GGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCG GCGTCCACACATTCCCCGCTGTCCTGCAGAGCAGCGGCCTGTACAGCCTGAGCTCC GTGGTCACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGG ACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGACC CCCCTGTCTCCTTGCCCTGCTCTGAAATTTCTCGGAGGCCCCCTCCGTCTTCCTGTTT CCCCCAAGCCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGT CGTGGTGGATGTGAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGAC GGAGTGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGC ACCTATCGGGTCGTGTCCGTGCTCACCCTCCTGCATCAGGATTGGCTCAACGGCAA GGAGTACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACC ATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAG CCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATT TACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAAC ACAAGACCACACCCCCGCTGCTGGACTCCGATGGCTCCTTCTTCCTGTACAGCAGG CTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGA TGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGC TAGTAA

FIG. 39 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
F847C.4B10 (847.4B10)	344	GAGGTGCAGCTTGTGAGACTGGGGGAGGCTTAGTGAAGCCTGGAGGGTCCCTGA AACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTAGCTATGCCATGTCTTGGGTTC GCCAGACTCCAGAGAAGAGGCTGGAGTGGGTTCGCATCCATTAGTAGTGGTGGTAG CACCTACTATCCAGACAGTGTGAAGGGCCGATTACCATCTCCAGAGATAATGCCA GGAACATCCTGTACCTGCAAATGAGCAGTCTGAGGTCTGAGGACACGGCCATGTAT TACTGTACAAGGTTTACTACGGTAGTAGAGATGGACTACTGGGGTCAAGGAACCTC AGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTG CAGCCGGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACT TCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCAC ACATTCCCCGCTGTCTGCAGAGCAGCGGCTGTACAGCCTGAGCTCCGTGGTCAC CGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAG CCCTCCAACACCAAGGTGGACAAGCGGGTGAATCCAAGTATGGACCCCCCTGTCT CTCCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCCTGTTTCCCCCA AGCCCAAGGACACCTGATGATCTCCCGACACCCGAAGTCACCTGCGTCTGGTG GATGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGG AGGTGCATAACGCCAAAACCAAGCCCAGGGAAGAGCAGTTCAACAGCACCTATCG GGTCTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTACA AGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAG GCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCTCCCTCCCAGCCAGGAGG AGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTCC GACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACCTACAAGACCA CACCCCCCGTGTGGACTCCGATGGCTCCTTCTTCCTGTACAGCAGGCTGACCGTG GACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGATGCACGAGG CTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA
F849C.8D10 (849.8D10)	345	CAGGTCCAACCTGCAGCAGACTGGTGCTGAGCTTGTGAAGCCTGGGGCCTCAGTGA AGCTGTCTGCAAGGCTTCTGGCTATACTTTCACCAGCTACTGGATAAACTGGGTG AAGCAGAGGCCTGGACAAGGCCTTGAGTGGATTGGAAACATTTATCCTGGTAGTA GTAGTATTTACTACAGTGAGAAGTTCAAGAGTAAGGCCACACTGACTGTAGACAC ATCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACATCTGACGACTCTGCGG TCTATTATTGTGCAAGATGGGGCTACTGGGGCCAAGGCACCACTCTCACAGTCTCC TCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTGCAGCCGGAGCAC ATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACTTCCCTGAACCCG TCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACACATTCCCCGCT GTCTGTCAGAGCAGCGGCTGTACAGCCTGAGCTCCGTGGTCACCGTGCTTAGCAG CAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCCCTCCAACACC AAGGTGGACAAGCGGGTGAATCCAAGTATGGACCCCCCTGTCTCCTTGCCCTGC TCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCTGTTTCCCCCAAGCCCAAGGACAC CCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCTGTGGTGGATGTCAGCCAGG AAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAGGTGCATAACGC CAAAACCAAGCCAGGGAAGAGCAGTTCAACAGCACCTATCGGGTCTGTCTCCGTG CTACCGTCTGTCATCAGGATTGGCTCAACGGCAAGGAGTACAAGTGAAGGTGTC CAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGCTAAGGGCCAA CCTCGGGAGCCCCAAGTGTATACCTCCCTCCCAGCCAGGAGGAGATGACCAAGA ATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTCCGACATCGCTGTG GAATGGGAAAGCAATGGCCAACCTGAGAACAACCTACAAGACCACACCCCCCGTGC TGGACTCCGATGGCTCCTTCTTCCTGTACAGCAGGCTGACCGTGGACAAATCCCGG TGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGATGCACGAGGCTCTCCACAACC ACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA

FIG. 39 cont.

120/185

Antibody	SEQ ID NO:	HC nucleic acid sequence
F849C.8H3	346	CAGGTTACTCTGAAAAGAGTCTGGCCCTGGGATATTGCAGCCCTCCCAGACCCTCAG TCTGACTTGTTCTTTCTCTGGGTTTTCAGTCTGAGCACTTTTGGTATGGGTGTAGGCTG GATTCGTCAGCCTTCAGGGAAGGGTCTGGAGTGGCTGGCACACATTTGGTGGGATG ATGATAAACTATAAACCAGCCCTGAAGAGCCGGCTCACAATCTCCAAGGATAC CTCCAAAAACCAGGTCTTCCTCAGGATCGCCAATGTGGACACTGCAGATAATGCCA CATATTACTGTGCTCGAATCGACTATGGTGACTACGTCGGGTTTGCTTATTGGGGCC AAGGGACTCTGGTCACTGTCTCTGCAGCTAGCACCAAGGGCCCCAGCGTGTTCCT CTCGTCCCTGCAGCCGGAGCACATCCGAGAGCACCCTGCTCTGGGCTGTCTCGT GAAGGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACAT CCGGCGTCCACACATTCCCCGCTGTCTGCAGAGCAGCGGCCCTGTACAGCCTGAGC TCCGTGGTCACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGT GGACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGA CCCCCTGTCTCCTTGCCCTGCTCTGAAATTTCTCGGAGGCCCTCCGTCTTCCTGT TTCCCCCAAGCCCAAGGACACCCTGATGATCTCCCGACACCCGAAGTCACCTGC GTCGTGGTGGATGTCAAGCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGG ACGGAGTGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACA GCACCTATCGGGTCGTGTCCGTGCTACCGTCTGCATCAGGATTGGCTCAACGGC AAGGAGTACAAGTGCAAGGTGTCCAACAAGGGCTGCCCTCCTCCATCGAGAAGA CCATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCC AGCCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGAT TTACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACA CTACAAGACCACACCCCCGCTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCA GGCTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTACAGTGTCTCCGT GATGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCG GCTAGTAA
846.2B11	536	CAGGTCCAGCTACAGCAGTCTGGACCTGAGCTGGTGAGGCCTGGGGCTTTAGTGAA GATTTCCTGCAAGGCTTCTGGTTACACCTTCACAAGCTACGATATAAACTGGGTGA AGCAGAGGCCTGGACAGGGACTTGAGTGGATTGGATGGATTTATCCTGGAGATGG TAGTACTAAATATAATGAGAAATTCAAGGGCAAGGCCACACTGACTGCAGACAAA TCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACTTCTGAGAACTCTGCAGT CTATTTCTGTGCAAGAGAGGCGGCTTCTAATGCTATGGACTACTGGGGTCAAGGAA CCTCAGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTC CCTGCAGCCGGAGCACATCCGAGAGCACCCTGCTCTGGGCTGTCTCGTGAAGGAC TACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGT CCACACATTCCCCGCTGTCTGCAGAGCAGCGGCCCTGTACAGCCTGAGCTCCGTGG TCACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCA TAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGACCCCC TGTCCTCCTTGCCCTGCTCTGAAATTTCTCGGAGGCCCTCCGTCTTCCTGTTTCCCC CCAAGCCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCTGT GTGGATGTCAAGCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAG TGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGCACCTA TCGGGTCGTGTCCGTGCTACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGT ACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCC AAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGG AGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCC CTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACCTACAAG ACCACACCCCCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGAC CGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTACAGTGTCTCCGTGATGCAC GAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTA A

FIG. 39 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
846.4D5	537	GAAGTGAAGCTTGAGGAGTCTGGAGGAGGCTTGGTGCAACCTGGAGGATCCATGA AACTCTCCTGTGTTGCCTCTGGATTCACTTTCAGTAACCTACTGGATGAACTGGGTCC GCCAGTCTCCAGAGAAGGGGCTTGAGTGGGTTGCTGAAATTAGATTGAAATCTAAT AATTATGCAACACATTATGCGGAGTCTGTGAAAGGGAGGTTACCATCTCAAGAG ATGATTCCAAAAGTAGTGTCTACCTGCAAATGAACAACCTAAGAGCTGAAGACACT GGCATTTATTACTGTACCAGGCACTACGGCTTTCCTACTGGTACTTCGATGTCTGG GGCGCAGGGACCACGGTCACCGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGT TCCTCTCGCTCCCTGCAGCCGGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTC TCGTGAAGGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAAATAGCGGCGCCCTG ACATCCGGCGTCCACACATTCCCCGCTGTCTGCAGAGCAGCGGCCCTGTACAGCCT GAGCTCCGTGGTCACCGTGCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGC AACGTGGACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAGT ATGGACCCCCCTGTCTCTTGCCTGTCTCTGAATTTCTCGGAGGCCCTCCGTCT TCCTGTTTCCCCCAAGCCCAAGGACACCCCTGATGATCTCCCGGACACCCGAAGTC ACCTGCGTCTGTGGTGGATGTACGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTA CGTGGACGGAGTGGAGGTGCATAACGCCAAAACCAAGCCCAGGGAAGAGCAGTTC AACAGCACCTATCGGGTCGTGTCCGTGCTACCGTCTGCATCAGGATTGGCTCAA CGGCAAGGAGTACAAGTGCAAGGTGTCCAACAAGGGCTGCCCTCCTCCATCGAG AAGACCATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCTCCC TCCCAGCCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAG GGATTTTACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACTGAGA ACAACTACAAGACCACACCCCCGTGCTGGACTCCGATGGCTCCTTCTCTCTGTAC AGCAGGCTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCT CCGTGATGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGC CTCGGCTAGTAA
847.14H4	538	CAGATCCAGTTGGTGCAGTCTGGACCTGAACTGACGAAGCCTGGAGAGACAGTCA AGATCTCCTGTAAGGCTTCTGGCTATACCTTACAGACTATGGAATGAACTGGGTG AGGCAGGCTCCAGGAGAGACTTTAAAGTGGATGGGCTGGATAAACACCTACACTG GAGAGCCAACATATGCTGATGACTTCAAGGGGCGGTTTGCCTTCTCTTTGGAATCC TCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAATGAGGACGTGGCTAC ATATTTCTGTGCAAGATACCCTATGGACTACTGGGGTCAAGGAACCTCAGTCACCG TCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTGCAGCCGG AGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACTTCCCTGA ACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACACATTCC CCGCTGTCTGCAGAGCAGCGGCCCTGTACAGCCTGAGCTCCGTGGTACCGTGCCT AGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCCCTCCA ACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGACCCCCCTGTCTCCTTGC CCTGCTCCTGAATTTCTCGGAGGCCCTCCGTCTTCTGTTCCTTCCCCCAAGCCCAAG GACACCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCGTGGTGGATGTGAG CCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAGGTGCAT AACGCCAAAACCAAGCCCAGGGAAGAGCAGTTCAACAGCACCTATCGGGTCTGTGT CCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTACAAGTGCAA GGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGCTAAGG GCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAGATGAC CAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTCCGACATCG CTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACCTACAAGACCACACCCCC CGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGACAAAT CCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGATGCACGAGGCTCTCCAC AACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA

FIG. 39 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
846T.1H2	539	CAGATCCAGTTGGTGCAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGGCTTCTGGGTATACCTTCACAACTATGGAATGAACTGGGTG AAGCAGGCTCCAGGAAAGGGTTTAAAGTGGATGGGCTGGATAAACACCAACACTG GAGAGCCAACATATGCTGAAGAGTTCAAGGGACGGTTTGCCTTCTCTTTGGAAACC TCTGCCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAAATGAGGACACGGCTAC ATATTTCTGTGCAACCGGGGGGGTAACTGGGACTTTGACTACTGGGGCCAAGGCA CCACTCTCACAGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTC CCTGCAGCCGGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGAC TACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGT CCACACATTCCCCGCTGTCTGCAGAGCAGCGGCTGTACAGCCTGAGCTCCGTGG TCACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCA TAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGAATCCAAGTATGGACCCCC TGTCCTCCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCCTGTTTCCCC CCAAGCCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCGTG GTGGATGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAG TGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGCACCTA TCGGGTCTGTCTCGTGTCTACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGT ACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCC AAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGG AGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCC CTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACCTACAAG ACCACACCCCCCGTGTGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGAC CGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTACAGTGTCTCCGTGATGCAC GAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTA A
mIMT001	540	CAGATCCAACTTGTGCAGTCAGGTCCAGAATTGAAGAAGCCTGGTGAGACCGTCA AGATTTCTGTAAAGGCCTCTGGTTATACTTTTACCAACTATGGCATGAATTGGGTCA AGCAGGCACCTGGGAAGGGTTTGAATGGATGGGGTGGATAAAATACCAACACAGG GGAACCAACTTACGTTGAAGAGTTTAAAGGGTCGTTTTGCATTACAGTCTTGAGACTT CTGCAAGCACAGCTTACCTCCAAATTAACAATCTCAAAAATGAAGATACTGCTACA TATTTCTGTGCTCCTTATGATAATTTTTCGCCTACTGGGGACAGGGAACTCTGGTC ACCGTCTCAGCAGCTAAGACTACTCCTCCAGTGTCTACCCCCCTGGCCCCCGTGTG CGGCGACACAACAGGCTCCTCCGTGACACTGGGCTGCCTGGTGAAAGGCTACTTCC CCGAGCCCGTGACACTGACATGGAACCTCCGGCTCCCTGTCTCCGGCGTGCACACA TTCCCCGCCGTGCTGCAGTCCGACCTGTACACACTGTCTCCTCCGTGACAGTGAC ATCCTCCACATGGCCCTCCAGTCCATCACATGCAACGTGGCCACCCCGCCTCCT CCACAAAAGTGGACAAAAAATCGAGCCCAAGGGGCCCAACATCAAAACCCTGCC CCCCTGCAAATGCCCCGCCCAACGCCGCCGGCGGCCCTCCGTGTTTCATCTTCC CCCCAAAATCAAAGACGTGCTGATGATCTCCCTGTCCCCCATCGTGACATGCGTG GTGGTGGACGTGTCCGAGGACGACCCGACGTGCAGATCTCTGGTTCTGTGAACAA CGTGGAGGTGCACACAGCCAGACACAGACACACAGGGAGGACTACAACCTCCACA CTGAGGGTGGTGTCCGCCCTGCCATCCAGCACCAGGACTGGATGTCCGGCAAAG AGTTCAAATGCAAAGTGAACAACAAAGACCTGGGCGCCCCCATCGAGAGGACAAT CTCCAAACCCAAAGGCTCCGTGAGGGCCCCCAGGTGTACGTGCTGCCCCCCCCCG AGGAGGAGATGACAAAAAACAGGTGACACTGACATGCATGGTGACAGACTTCAT GCCCCGAGGACATCTACGTGGAGTGGACAAACAACGGCAAAACAGAGCTGAACTAC AAAAACACAGAGCCCGTGTGACTCCGACGGCTCCTACTTCATGTACTCCAAACT GAGGGTGGAGAAAAAACTGGGTGGAGAGGAACTCCTACTCCTGCTCCGTGGTG CACGAGGGCCTGCACAACCACACACAACAAATCCTTCTCCAGGACACCCGGCA AATAGTAA

FIG. 39 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
4A11.2B5	541	CAGGTACAACCTTCAGCAGAGCGGTCCAGAACTTGTGAAGCCCGGTGCTAGTGTCA AAATATCTTGCAAAGCAAGTGGTTATTCCTTCACCAACTATTACATACACTGGGTA AAACAACGTCCAGGGCAAGGACTCGAATGGATTGGTTGGATCTACCCCGGCAGCG GCAACACTAACTACAACGAGAAGTTTAAAGGCAAAGCTACTCTCACAGCAGACAC TTCTAGCAGTACAACAAATATGCAGTTGTCTCTCTGACTTCCGAAGACAGCGCCG TCTATTACTGTTCTACTGCACCCGGAGGTTTTGACGTC'TGGGGT'TCCGGCACCACAG TTACCGTTAGTTCCGCTAGCACCAAGGGCCCCAGCGTGT'TCTCTCGCTCCCTGCA GCCGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACTTC CCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACAC ATTCCCCGCTGTCTGTCAGAGCAGCGGCCCTGTACAGCCTGAGCTCCGTGGTCAACCG TGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCC CTCCAACACCAAGGTGGACAAGCGGGTGGAATCCAAGTATGGACCCCCCTGTCTCTC CTTGCCCTGCTCCTGAATTTCTCGGAGGCCCTCCGTC'TTCTGT'TTCCCCCAAGC CCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCGTGGTGGAT GTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAGG TGCATAACGCCAAAACCAAGCCCAGGGAAGAGCAGTTCAACAGCACCTATCGGGT CGTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTACAAGT GCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGCT AAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAGA TGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTCCGAC ATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACATCAAGACCACAC CCCCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGAC AAATCCCGGTGGCAAGAGGGAAACGTGTTTCACTGCTCCGTGATGCACGAGGCTC TCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA
4A11.H1L1	542	CAGGTGCAGCTGGTGCAATCAGGAGCCGAAGTTAAGAAGCCTGGCGCCAGCGTCA AGGTCTCATGTAAAGCCTCCGGTTACAGTTTCACCAACTACTATATGCACTGGGTT AGGCAAGCACCAGGCCAGGGGCTTGAGTGGATGGGATGGATCTATCCAGGGAGCG GTAACACCAATTACAAATGAGAAGTTTCAAGGGCGCGTAAGCATGACAGCAGATAC CAGTATAAGCACCGCCTATATGGAACCTCTCTCGGTTGAGATCCGATGATACCGCTG TTTATTACTGCTCTACCGCACCTGGTGGTTTCGACGTTTGGGGCCAAGGTACTACAG TGACCGTATCATCAGCTAGCACCAAGGGCCCCAGCGTGT'TCCTCTCGCTCCCTGC AGCCGGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACTT CCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACA CATTCCCCGCTGTCTGTCAGAGCAGCGGCCCTGTACAGCCTGAGCTCCGTGGTCACC GTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGC CCTCCAACACCAAGGTGGACAAGCGGGTGGAATCCAAGTATGGACCCCCCTGTCTCT CCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCTCCGTC'TTCTGT'TTCCCCCAAG CCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCGTGGTGGGA TGTGATAACGCCAAAACCAAGCCCAGGGAAGAGCAGTTCAACAGCACCTATCGGG TCGTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTACAAG TGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGC TAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAG ATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTCCGA CATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACCTACAAGACCACA CCCCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGGA CAAATCCCGGTGGCAAGAGGGAAACGTGTTTCACTGCTCCGTGATGCACGAGGCT CTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA

FIG. 39 cont.

124/185

Antibody	SEQ ID NO:	HC nucleic acid sequence
4A11.H4L2	543	CAGGTGCAACTGGTCCAGTCTGCGGGCCGAGGTCAAAAAGCCTGGAGCCTCCGTCA AAGTGTCATGTAAAGCCTCAGGGTATAGTTTCACCAACTACTATATACATGGGTC AGACAAGCCCCAGGCCAGCGTCTTGAGTGGATGGGATGGATTTATCCCGGATCAG GGAATACAACTATAACGAGAAATTTCAAGGCAGAGTTACTCTCACTGCCGATACC TCTGCAAGTACTACCTATATGGAGCTCTCCAGTCTCAGAAGCGAAGACACAGCAGT ATATTACTGTAGCACCGCCCCAGGCGGGTTTGACGTGTGGGGCCAAGGCACTACTG TAACCGTTAGCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTGC AGCCGGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACTT CCCTGAACCCGTCACCGTCAGCTGGAAATAGCGGCGCCCTGACATCCGGCGTCCACA CATTCCCCGCTGTCTGCAGAGCAGCGGCCTGTACAGCCTGAGCTCCGTGGTCACC GTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGC CCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGACCCCCCTGTCT CCTTGCCCTGCTCCTGAATTTCTCGAGGCCCCCTCCGTCTTCCTGTTTCCCCCAAG CCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCGTGGTGG TGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAG GTGCATAACGCCAAAACCAAGCCCAGGGAAGAGCAGTTCAACAGCACCTATCGGG TCGTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTACAAG TGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGC TAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAG ATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTCCGA CATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACACCAAGACCACA CCCCCGTGCTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGG CAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGATGCACGAGGCT CTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA
4G2.2G6	544	CAAATACAGCTCGTGCACTCTGGTCCCGATTGGAAGAAGCCTGGAGAAACCGTAA AGATAAGCTGTAAGGCTAGTGGTTACACTTTCACAACATACGTTATGTTCATGGGT AAACAGGCTCCTGGAAAAGACCTTAAATGGATGGGATGGATTAACACCCATAGCG GTGTCCCAACTTACGCTGACGATTTTAAGGGACGATTGACTTTTCTCTCGAACTT CTGCCAACACAGCTTTTTTGCAGATCAACAATCTCAAGAATGAAGACACCGCAACC TATTTCTGCACTCGAGATGGGAACGACGGGGATGCAATGGATAACTGGGGACAAG GCACATCAGTTACCGTGAGCTCTGTAGCACCAAGGGCCCCAGCGTGTTCCTCTC GCTCCCTGCAGCCGGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAA GGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCG GCGTCCACACATTCCCCGCTGTCTGTCAGAGCAGCGGCCTGTACAGCCTGAGCTCC GTGGTCAACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGG ACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGACC CCCCTGTCTCCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCCTGTT CCCCCAAGCCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGT CGTGGTGGATGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGAC GGAGTGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGC ACCTATCGGGTCGTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAA GGAGTACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACC ATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAG CCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATT TACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAAC ACAAGACCACACCCCCGTGCTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGG CTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGA TGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGC TAGTAA

FIG. 39 cont.

125/185

Antibody	SEQ ID NO:	HC nucleic acid sequence
6B3.2D3	545	CAGGTGCAGCTGAAGCAGTCAGGACCTGGCCTAGTGCAGCCCTCACAGAGCCTGT CCATCACCTGCACAGTCTCTGGTTTCTCATTAAGTAGTTATGGTGTACACTGGGTTT GCCAGCCTCCAGGAAAGGGTCTGGAGTGGCTGGGAGTGATATGGAGTGGTGGAAAG CACAGACTATAATGCTGCTTTTCATATCCAGACTGAGCATCAGTAAGGACAACCTCCA AGAGCCAAGTTTCTTTAAAATGAACAGTCTGCAAGCTGATGACACTGCCATATAC TACTGTGCCAAAGGGCCTTATGATTACGACTTAGGCTGGTTTGCTTACTGGGGCCA AGGGAAGTCTGGTCACTGTCTCTGCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTC TCGCTCCCTGCAGCCGGAGCACATCCGAGAGCACCCTGCTCTGGGCTGTCTCGTG AAGGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATC CGGCGTCCACACATTCCCCGCTGTCTGCAGAGCAGCGGCTGTACAGCCTGAGCT CCGTGGTCACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGT GGACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAAGTATGGA CCCCCTGTCTCCTTGGCCCTGCTCTCTGAATTTCTCGGAGGCCCCCTCCGTCTTCTGT TTCCCCCAAGCCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGC GTCGTGGTGGATGTTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGG ACGGAGTGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACA GCACCTATCGGGTCGTGTCCGTGCTACCGTCTGCATCAGGATTGGCTCAACGGC AAGGAGTACAAGTGCAAGGTGTCCAACAAGGGCTTGCCTCTCCATCGAGAAGA CCATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCC AGCCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGAT TTTACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACA CTACAAGACCACACCCCCGCTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCA GGCTGACCGTGGACAAATCCCGGTGGCAAGAGGGAACGTGTTTCAGCTGCTCCGT GATGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCG GCTAGTAA
6H6.2D6	546	CAGATCCAGCTGGTGCAGTCCGGCCCCGAGCTGAAGAAGCCCCGGCGAGACTGTGA AGATCTCCTGCAAGGCCTCCGGCTACACCTTCACCACTACGGCATGTCTGGGTG AAGCAGGCCCCCGCAAGGGCCTGAAGTGGATGGCCTGGATCAACACCTACTCCG GCGTGCCCACTACGCCGACGACTTCAAGGGCAGGTTTCGCTTCTCCCTGGAGACT TCCGCCTCCACCGCTACCTGCAGATCAACAACCTGACCAACGAGGACACCGCCAC CTACTTCTGCGCCAGGGGCCCTACGCCATGGACTACTGGGGCCAGGGCACCTCCG TGACCGTGTCTCCGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTGCA GCCGAGCACATCCGAGAGCACCCTGCTCTGGGCTGTCTCGTGAAGGACTACTTC CCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACAC ATTCCCCGCTGTCTGCAGAGCAGCGGCTGTACAGCCTGAGCTCCGTGGTCAACCG TGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCC CTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGACCCCCCTGTCTC CTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCTGTGTTCCCCCAAGC CCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCGTGGTGGAT GTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAGG TGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGCACCTATCGGGT CGTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTACAAGT GCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGCT AAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAGA TGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTCCGAC ATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACCTACAAGACCACAC CCCCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGAC AAATCCCGGTGGCAAGAGGGAACGTGTTTCAGCTGCTCCGTGATGCACGAGGCTC TCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA

FIG. 39 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
9H2.2H10	547	CAGGTCCAGCTGCAGCAGCCTGGGGCTGAACTGGTGGGGCCTGGGTCTTCAGTGA AGCTGTCTTGCAAGGCTTCTGGGTACACCTTCACCAACTACTGGATACATTGGGTG AAGCAGAGGCCTCTACAAGGCCTTGAATGGATTGGTAACATTGACCCTTCTGATAG TGAAACTCACTACAATCAAAAGTTCAAGGACAAGGCCACATTGACTGTAGACAAA TCCTCCAGCACAGCCTACATGCAACTCAGCAGCCTGACATCTGAGGACTCTGCGGT CTATTACTGTGCAAGACATGGTTACTACGACTACTGGGGCCAAGGCACCACCTCTCA CAGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTGCAGC CGGAGCACATCCGAGAGCACCCTGCTCTGGGCTGTCTCGTGAAGGACTACTTCCC TGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACACAT TCCCCGCTGTCTGCAGAGCAGCGGCCTGTACAGCCTGAGCTCCGTGGTCAACCGTG CCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCCCT CCAACACCAAGGTGGACAAGCGGGTGAATCCAAGTATGGACCCCTGTCTCCT TGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCCTGTTTCCCCCAAGCCC AAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCTGGTGGATGT CAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAGGTG CATAACGCCAAAACCAAGCCCAGGGAAGAGCAGTTCAACAGCACCTATCGGGTCTG TGTCCGTGCTCACCCTCTGCATCAGGATTGGCTCAACGGCAAGGAGTACAAGTGC AAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGCTAA GGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAGATG ACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTACCCCTCCGACAT CGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACCTGAAGACCACACC CCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGACAA ATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGATGCACGAGGCTCTCC ACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA
13G4.2F8	548	CAGGTCCAGCTGCAGCAGCCTGGGGCTGAGCTGGTAAAGCCTGGGGCTTCAGTGA AGTTGTCTTGCAAGGCTTCTGGGTACACTTTCACCAGCTACTGGATGCACTGGGTG AAGCAGAGGCCTGGACAAGGCCTTGAGTGGATTGGAATGATTCATCCTAACAGTG GTAGTACTGACTACAATGAGAAGTTCAAGAACAAGGCCACACTGAATGTAGACAA ATCCTCCAGTACAGCCTACATACAACCTCAGCAGCCTGACATCTGAGGACTCTGCGG TCTATTACTGTACAAGATGGGGGATTTATTACTACGCGAGGGACTACTGGGGCCAA GGCACCCTCTCAGAGTCTCCTCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCT CGCTCCCTGCAGCCGGAGCACATCCGAGAGCACCCTGCTCTGGGCTGTCTCGTGA AGGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCC GGCGTCCACACATTCCCCGCTGTCTTCAGAGCAGCGGCCTGTACAGCCTGAGCTC CGTGGTCAACCGTGCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTG GACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGAC CCCCCTGTCTCCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCCTGTT TCCCCCAAGCCCAAGGACACCCCTGATGATCTCCCGGACACCCGAAGTCACCTGCG TCGTGGTGGATGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGA CGGAGTGGAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGC ACCTATCGGGTCTGTCTCGTCTACCGTCTCTGCATCAGGATTGGCTCAACGGCAA GGAGTACAAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACC ATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAG CCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTT TACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACCT ACAAGACCACACCCCCGTGCTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGG CTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGA TGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGC TAGTAA

FIG. 39 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
13H12.2F8	549	CAGATCCAGCTGGTCCAATCAGGACCCGAACTGAAAAAACAGGCGAGACAGTCA AAATCAGCTGTAAGGCCTCAGGCTACACTTTCACAACCTACGGGATGTCATGGGTA AAGCAAGCTCCTGGCAAGGGGCTGAAATGGATGGGTTGGATCAACACATACTCTG GAGTGCCACCTACGCTGACGACTTTAAGGGTAGATTTCGATTTAGCCTGGAAACA AGTGCCAGTACAGCCTACCTCCAGATAAACAACCTGAAAAACGAGGATACCGCAA CCTATTTTTGCGCCGTCCCCTACGAGTACGACGGTGCCTATTGGGGTCAGGGTACA CTCGTAACAGTTTCCGCCGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCC TGCAGCCGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTA CTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCC ACACATTCCCCGCTGTCTGTCAGAGCAGCGGCCTGTACAGCCTGAGCTCCGTGGTC ACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATA AGCCCTCCAACACCAAGGTGGACAAGCGGGTGAATCCAAGTATGGACCCCCCTG TCCTCCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCCTGTTTCCCCC AAGCCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTACCTGCGTCGTGGT GGATGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTG GAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGCACCTATC GGGTCGTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTAC AAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAA GGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAG GAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTACCCCTC CGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACATAAGACC ACACCCCCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGT GGACAAATCCCGGTGGCAAGAGGGAAACGTGTTACAGCTGCTCCGTGATGCACGAG GCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA
15G7.2A7	550	GAGGTCCAGCTGCAACAATCTGGACCTGAGCTGGTGAAGCCTGGGGCTTCAGTGA AGATATCCTGTAAGGCTTCTGGATACACGTTCACTGACTACTACATGAAGTGGGTG AAGCAGAGCCATGGAAAGAGCCTTGAGTGGATTGGAGATTAATCCTAACAATG GTGGTACTAATAACAACCAAGGTTCAAGGGCAAGGCCACATTGACTGTAGACAA GTCTCCAGCACAGCCTACATGGAGCTCCGCAGCCTGACATCTGAGGACTCTGCAG TCTATTACTGCACCTCAGGCTACGGGTTTCTTACTGGGGCCAGGGGACTCTGGTC ACTGTCTCTGCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTGCAG CCGGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTACTTCC CTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACACA TTCCCGCTGTCTGTCAGAGCAGCGGCCTGTACAGCCTGAGCTCCGTGGTCAACCT GCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCCC TCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAGTATGGACCCCCCTGTCTCC TTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCCTGTTTCCCCCAAGCC CAAGGACACCCCTGATGATCTCCCGGACACCCGAAGTCACCTGCGTCGTGGTGGATG TCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAGGT GCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGCACCTATCGGGTC GTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTACAAGTG CAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGCTA AGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAGAT GACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTCCGACA TCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACATAAGACCACACC CCCCGTGCTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGACA AATCCCGGTGGCAAGAGGGAAACGTGTTACAGCTGCTCCGTGATGCACGAGGCTCTC CACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA

FIG. 39 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
19D9.2E5	551	CAGATCCAGTTGGTACAGTCTGGACCTGAGCTGAAGAAGCCTGGAGAGACAGTCA AGATCTCCTGCAAGGCTTCTGGATATACCTTCACAACCTATGGAATGGGCTGGGTG AAACAGGCTCCAGGAAAGGGTTTGAAGTGGATGGGCTGGATAAACACCTACTCTG GCGTGCCAAACATATGCTGATGACTTCAAGGGACGGTTTGCCTTCTCTTTGGAAACC TCTACCAGCACTGCCTATTTGCAGATCAACAACCTCAAAAAATGAGGACATGGCTAC ATATTTCTGTGCAACCCCTTATGAATACGACGGGGCTTACTGGGGCCAAGGGACTC TGGTCACTGTCTCTGCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCT GCAGCCGGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTGAAGGACTA CTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCC ACACATTCCCCGCTGTCTGCAGAGCAGCGGCCTGTACAGCCTGAGCTCCGTGGTC ACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGTGGACCATA AGCCCTCCAACACCAAGGTGGACAAGCGGGTGAATCCAAGTATGGACCCCTG TCCTCCTTGCCCTGCTCCTGAATTTCTCGGAGGCCCCCTCCGTCTTCCTGTTTCCCCC AAGCCCAAGGACACCCTGATGATCTCCCGGACACCCGAAGTCACTGCGTCGTGGT GGATGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTG GAGGTGCATAACGCCAAAACCAAGCCAGGGAAGAGCAGTTCAACAGCACCTATC GGGTCGTGTCCGTGCTCACCGTCTGCATCAGGATTGGCTCAACGGCAAGGAGTAC AAGTGCAAGGTGTCCAACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAA GGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAG GAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTC CGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAACATGACAGACC ACACCCCCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGT GGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGATGCACGAG GCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA
23B10.2B12	552	CAGGTCCAGCTGCAGCAGTCTGGACCTGAACTGGTGAAGCCTGGGGATTCTGTGAA GATATCCTGCAAGGCTGCTGGCTACACCTTCAGTGACTATTATATAAACTGGGTGA AGCAGAGGCCTGGACAGGGACTTGAGTGGATTGGATGGATTTATCCTGTAAGCGTT AATACTAAGTACCAATGAGAAGTTCAAGGGCAAGGCCACATTGACTGTAGACACAT CCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACCTCTGAGGACTCTGGGGTC TATTTCTGTGCCTACCTTGATTATTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCA GCTAGCACCAAGGGCCCCAGCGTGTTCCTCTCGCTCCCTGCAGCCGGAGCACATC CGAGAGCACCCGTGCTCTGGGCTGTCTCGTGAAGGACTACTTCCCTGAACCCGTCA CCGTCAGCTGGAATAGCGGCGCCCTGACATCCGGCGTCCACACATTCCCCGCTGTC CTGCAGAGCAGCGGCCTGTACAGCCTGAGCTCCGTGGTACCCGTGCCTAGCAGCAG CCTGGGAACAAAGACCTACACCTGCAACGTGGACCATAAGCCCTCCAACACCAAG GTGGACAAGCGGGTGGAAATCCAAGTATGGACCCCCCTGTCTCCTTGCCCTGCTCC TGAATTTCTCGGAGGCCCCCTCCGTCTTCTGTGTTCCCCCAAGCCCAAGGACACCCT GATGATCTCCCGGACACCCGAAGTCACCTGCGTCTGGTGGATGTCAGCCAGGAA GATCCCGAGGTGCAGTTCAACTGGTACGTGGACGGAGTGGAGGTGCATAACGCCA AAACCAAGCCCAGGGAAGAGCAGTTCAACAGCACCTATCGGGTCGTGTCCGTGCT CACCGTCTGTCATCAGGATTGGCTCAACGGCAAGGAGTACAAGTGAAGGTGTCC AACAAGGGCCTGCCCTCCTCCATCGAGAAGACCATCTCCAAGGCTAAGGGCCAAC CTCGGGAGCCCCAAGTGTATACCCTCCCTCCCAGCCAGGAGGAGATGACCAAGAA TCAAGTGAGCCTGACCTGCCTCGTGAAGGGATTTTACCCCTCCGACATCGCTGTGG AATGGGAAAGCAATGGCCAACCTGAGAACAACCTACAAGACCACACCCCCCGTGT GGACTCCGATGGCTCCTTCTTCTGTACAGCAGGCTGACCGTGGACAAATCCCGGT GGCAAGAGGGAAACGTGTTTCAGCTGCTCCGTGATGCACGAGGCTCTCCACAACCA CTACACCCAGAAGAGCCTCTCCCTGAGCCTCGGCTAGTAA

FIG. 39 cont.

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Antibody	SEQ ID NO:	HC nucleic acid sequence
24D12.2H9	553	CAGGTGCAGCTGAAGCAGTCAGGACCTGGCCTAGTGCAGCCCTCACAGAGCCTGT CCATCACCTGCACAGTCTCTGGTTTCTCATTAACTAGCTATGGTGTACACTGGGTTC GCCAGGCTCCAGGAAAGGGTCTGGAATGGCTGGGAGTGATATGGAGTGGTGGAAAG CACAGACTATAATGCTGCTTTTCATGTCCAGACTGAGCATCAGCAAGGACAACCTCCA AGAGCCAAGTTTTCTTTAAAATGAACAGTCTGCAAGCTGATGACACTGCCATATAC TACTGTGCCAAAAGCCCTGATGGTTACGACGTCGCCTGGTTTGGTTACTGGGGCCA AGGGA CTCTGGTCACTGTCTCTGCAGCTAGCACCAAGGGCCCCAGCGTGTTCCTC TCGCTCCCTGCAGCCGGAGCACATCCGAGAGCACCGCTGCTCTGGGCTGTCTCGTG AAGGACTACTTCCCTGAACCCGTCACCGTCAGCTGGAATAGCGGCGCCCTGACATC CGGCGTCCACACATTCCCCGCTGTCCTGCAGAGCAGCGGCCTGTACAGCCTGAGCT CCGTGGTCACCGTGCCTAGCAGCAGCCTGGGAACAAAGACCTACACCTGCAACGT GGACCATAAGCCCTCCAACACCAAGGTGGACAAGCGGGTGGAAATCCAAAGTATGGA CCCCCTGTCTCTCTGCCCCTGCTCCTGAATTTCTCGGAGGCCCTCCGTCTTCCTGT TTCCCCCAAGCCCAAGGACACCCTGATGATCTCCCGACACCCGAAGTCACCTGC GTCGTGGTGGATGTCAGCCAGGAAGATCCCGAGGTGCAGTTCAACTGGTACGTGG ACGGAGTGGAGGTGCATAACGCCAAAACCAAGCCCAGGGAAGAGCAGTTCAACA GCACCTATCGGGTCGTGTCCGTGCTACCGTCCTGCATCAGGATTGGCTCAACGGC AAGGAGTACAAGTGCAAGGTGTCCAACAAGGGCTGCCCTCCTCCATCGAGAAGA CCATCTCCAAGGCTAAGGGCCAACCTCGGGAGCCCCAAGTGTATACCCTCCCTCCC AGCCAGGAGGAGATGACCAAGAATCAAGTGAGCCTGACCTGCCTCGTGAAGGGAT TTTACCCCTCCGACATCGCTGTGGAATGGGAAAGCAATGGCCAACCTGAGAACAA CTACAAGACCACACCCCCCGTGTGGACTCCGATGGCTCCTTCTTCTGTACAGCA GGCTGACCGTGGACAAATCCCGGTGGCAAGAGGGAAACGTGTTTCAGCTGCTCCGT GATGCACGAGGCTCTCCACAACCACTACACCCAGAAGAGCCTCTCCCTGAGCCTCG GCTAGTAA

FIG. 39 cont.

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Antibody	SEQ ID NO:	LC nucleic acid sequence
TB001 (IMT001-4)	347	GACATCGTGCTGACCCAGTCTCCACTGAGCCTGCCTGTTACACCTGGCGAGCCAGC CTCCATCTCCTGCAGATCCTCTAAGTCCCTGCTGTACAAGGACGGCAAGACCTACC TGAACCTGGTTCCTGCAGAAAGCCCGGCCAGTCTCCTCAGCTCCTGATCTACCTGATG AGCACCCATGCCTCTGGCGTGCCCGATAGATTTTCCGGCTCTGGCTCTGGCACC CTTCACCCTGAAGATCTCCAGAGTGGAAGCCGAGGACGTGGGCGTGTA ACTACTGTG AGCAGCTGGTGGACTACCCTCTGACCTTTGGCGGCGGAACAAAGCTGGAAATCAA GCGGACAGTGGCCGCTCCTTCCGTGTTTCATCTTCCACCTTCCGACGAGCAGCTGA AGTCCGGCACAGCTTCTGTGCTGTGCCTGCTGAACAACCTTACCCCTCGGGAAGCC AAGGTGCAGTGGAAAGGTGGACAATGCCCTGCAGTCCGGCAACTCCCAAGAGTCTG TGACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGTCTCCACACTGACCCTG TCCAAGGCCGACTACGAGAAGCACAAGGTGTACGCTGCGAAGTGACCCATCAGG GCCTGTCTAGCCCTGTGACCAAGTCTTTCAACCGGGGCGAGTGCTGATGA
TB006 (4A11.H3L1)	348	GATATAGTGATGACCCAAACACCTTTGTCCCTGTGAGTCACCCAGGCCAACCCGC ATCTATCTCATGCAAATCCTCAAAAAGTCTTTTGCACTCTGACGGGATAACATATCT CTACTGGTATCTTCAAAAACCTGGTCAGTCCCCCAGCTCTTGATCTATAGAATGA GTAACCTTGCTCTGGTGTCCCGACCGGTTTAGTGGAAGCGGGTCTGGGACCGAC TTCACCCTCAAGATTAGTCGCGTGAAGCCGAAGATGTGGGAGTGTA TTACTGTGC CCAGATGCTCGAATTTCCTGACATTTGGTCAAGGAACATAAATGGAGATTAAAGC GGACCGTGGCCGCCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAG TCTGGCACCGCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCGCGAGGCCAA GGTGCAGTGGAAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGT GACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCCTG AGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCTGCGAGGTGACCCACCAGG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
12G5.D7	349	GACATCCTGATGACCCAATCTCCATCCTCCATGTCTGTATCTCTGGGAGACACAGT CAGCATCACTTGCCATGCAAGTCAGGGCATTAACTCTAATATGGGGTGGTTGCAGC AGAAACCAGGGAAATCATTTAAGGGCCTGATCTATCATGCAACCAACTTGAAGA TGGAGTTCCATCAAGGTTCAAGTGGCAGTGGATCTGGAGCAGATTATTCTCTACCA TCAGCAGCCTGGAATCTGAAGATTTTGCAGACTATTACTGTGTACAGTATGCTCAG TTTCTCTCTACGTTCCGATCGGGGACCAAGCTGGAAATAAAACGGACCGTGGCCGC CCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCGCCA GCGTGGTGTGCTGTGAACAACCTTCTACCCCGCGAGGCCAAGGTGCAGTGGAA GGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGA CTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAGGCCGAC TACGAGAAGCACAAGGTGTACGCTGCGAGGTGACCCACCAGGGACTGTCTAGCC CCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
13A12.2E5	350	GATGTTGTGATGACCCAGACTCCACTCACTTTGTGCGTTGCCATTGGACAACCCAGC TTCCATCTCTTGCAAGTCGAGTCAGAGCCTCTTATATACTAATGGAAAAACCTATTT GAATTGGTTATTACAGAGGCCAGGCCAGTCTCCAAAACGCCTAATCTATCTGCTGT CTAAATTGGACTCTGGAGTCCCTGACAGGTTCAAGTCCAGTGGATCAGGGACAGAT TTCACACTGAAAATCAGCAGAGTGGAGGCTGAGGATTTGGGAGTTTATTACTGCTT GCAGAGTACACATTTTCCGCTCACGTTCCGGTGTGGGACCAAGCTGGAGATGAAAC GGACCGTGGCCGCCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAG TCTGGCACCGCCAGCGTGGTGTGCTGTGAACAACCTTCTACCCCGCGAGGCCAA GGTGCAGTGGAAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGT GACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTG AGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCTGCGAGGTGACCCACCAGG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA

FIG. 40

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Antibody	SEQ ID NO:	LC nucleic acid sequence
14H10.2C9 (14H10)	351	GATGTTGTGATGACCCAGACTCCACTCACTTTGTGCGTTACCATTGGACAACCAGC CTCCATCTCTTGCAAGTCAAGTCAGAGCCTCTTCGATAGTGATGGAAAGACATATT TGAATTGGTTGTTACAGAGGCCAGGCCAGTCTCCAAAGCGCCTAATCTATCTGGTG TCTAAACTGGACTCTGGAGTCCCTGACAGGTTCACTGGCAGTGGATCAGGGACAGA TTTCACACTGAAAATCAGCAGAGTGGAGGCTGAGGATTTGGGAGTTTATTATTGCT GGCAAGGTACACATTTTCTCTCACGTTTCGGTGCTGGGACCAAGCTGGAAATGAAA CGGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAA GTCTGGCACCGCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCGCGAGGCCA AGGTGCAGTGGAAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCG TGACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCCT GAGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAG GGACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
15F10.2D6 (15F10)	352	GATGTTTTGATGACCCAAACTCCACTCTCCCTGCCTGTCAGTCTTGGAGATCAAGCC TCCATCTCTTGCAAGTCAAGTCAGAGCATTGTACATAATAATGGAAACACCTATTT AGAATGGTACCTGCAGAAACCAGGCCAGTCTCCAAACTCCTGATCTACAAAGTTT CCAACCGATTTTCTGGGGTCCCAGACAGGTTCACTGGCAGTGGATCAGGGACAGAT TTCACACTCAAGATCAGCAGAGTGGAGGCTGAGGATCTGGGAGTTTATTACTGCTT TCAAGGTTACATGTTCCGCTCACGTTTCGGTGGTGGGACCAAGTTGGAGCTGAAAC GGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAG TCTGGCACCGCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCGCGAGGCCAA GGTGCAGTGGAAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGT GACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCCTG AGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
19B5.2E6 (19B5)	353	GATATACAAATGACTCAAACCTACCTCTTCTTTCCGCATCTTTGGGTGATCGGGTC ACTATATCTGCTCCGCCTCTCAAGGCATAAACAATTACCTGAATTGGTATCAGCA AAAACCAGACGGAACGTGTAATAATTGCTTATCTACTACGCTTCAAGTCTGCATAGTG GGGTTCACAGCAGATTTTCCGGTTCCGGGTCCGGCACTGATTATTCTCTACAATTA GTAACCTGGAACTGAGGACATTGCAACTTATTACTGTCAACAATACAGTCAGGTA CCTTACACTTTTCGGATCAGGAACAAAGTTGGAAATCAAGAGGACCGTGGCCGCC CCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCGCCAGC GTGGTGTGCCTGCTGAACAACCTTCTACCCCGCGAGGCCAAGGTGCAGTGGAAAGGT GGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGACTCC AAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAGGCCGACTACG AGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCTAGCCCCGT GACCAAGAGCTTCAACCGGGGCGAGTGCTAA
20D11.2C6 (20D11)	354	GACATCCAGATGAACCAGTCTCCATCCAGTCTGTCTGCATCCCTCGGAGACACAAT TACCATCACTTGCCGTGCCAGTCAGAACATTTATATTTGGTTAAGTTGGTACCAGC AGAAACCAGGAAATATTCCTAAACTCTTGATCTATAAGGCTTCCAACCTGACACACA GGCGTCCCATCAAGGTTTAGTGGCAGTGGATCTGGAACAGATTTACATTAACCAT CAGCACTCTGCAGCCTGAAGACATTGCCACTTACTTCTGTCTCCAGGGTCAAAGTT ATCCTCTCACGTTTCGGTGTGTTGGGACCAAGCTGGAGATGAAACGGACCGTGGCCGCC CCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCGCCAG CGTGGTGTGCCTGCTGAACAACCTTCTACCCCGCGAGGCCAAGGTGCAGTGGAAAG GTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGACT CCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAGGCCGACTA CGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCTAGCCCC GTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA

FIG. 40 cont.

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Antibody	SEQ ID NO:	LC nucleic acid sequence
20H5.A3 (20H5)	355	GATATCCAGATGACACAGACTACATCCTCCCTGTCTGCCTCTCTGGGAGACAGAGT CACCATCAATTGCAGTGCAAGTCAGGACATTAGCAATTATTTAACTGGTATCAGC AGAAACCAGATGGAAGTGTAACTCCTGATCTATTACACATCAAGTTTACTCTCA GGAGTCCCATCAAGGTTTCAGTGGCAGTGGGTCTGGGACAGATTATTCTCTCACCAT CAGCAACCTGGAACCTGAAGATATTGCCACTTACTTTTGTTCAGCAATATAGTAAGC TTCCCTATACGTTTCGGATCGGGGACCCACCTGGAAATAAAACGGACCGTGGCCGCC CCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCGCCAG CGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAGGTGCAGTGGAAG GTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGACT CCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAGGCCGACTA CGAGAAGCACAAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCTAGCCCC GTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
23H9.2E4 (23H9)	356	GATATCCAGATGACACAGACTACATCCTCCCTGTCTGCCTCTCTGGGAGACAGAGT CACCATCAGTTGCAGTGCAAGTCAGGGCATTAAACAATTATTTAACTGGTATCAGC AGAAACCAGATGGAAGTGTAACTCCTGATCTATTACGCATCAAGTTTACACTCA GGAGTCCCATCAAGGTTTCAGTGGCAGTGGGTCTGGGACAGATTATTCTCTCACCAT CAGCAACCTGGAACCTGAAGATATTGCCACTTACTATTGTTCAGCAGTATAGTCAGG TTCCGTATACGTTTCGGATCGGGGACCAAGTTGGAAATAAAACGGACCGTGGCCGC CCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCGCCA GCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAGGTGCAGTGGAAG GGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGA CTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAGGCCGAC TACGAGAAGCACAAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCTAGCC CCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
2D10.2B2 (2D10)	357	GACATAGTAATGACACAGGCCGATTTAGCAATCCAGTAACCTTGGGCACATCCGC CTCCATATCTTGCAGGTCATCCAAAAGCTTGCTGCACTCTGACGGTATTACTTACCT GTACTGGTATTTGCAGCGACCTGGGCAATCCCTCAACTCCTGATTTACCGCATGA GCAACCTGGCCTCAGGGGTGCCTGACCGCTTTTCAGGATCAGGGAGCGGCAGTGAC TTCACCTTGCGAATCAGCAGAGTAGAAGCAGAGGATGTTGGAGTTTACTACTGTGC CCAGATGATCGAATTTCCACTTACTTTTGGGGCCGGGACCATTCTGGAGCTTAAAC GGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAG TCTGGCACCGCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAA GGTGCAGTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGT GACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCCTG AGCAAGGCCGACTACGAGAAGCACAAAGGTGTACGCCTGCGAGGTGACCCACCAGG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
3B11.2G2 (3B11)	358	GATGTTGTGATGACCCAGACTCCACTCACTTTGTGCGTTGCCATTGGACAACCAGC TTCCATCTCTTGCAAGTCGAGTCAGAGCCTCTTATATACTAATGGAAAAACCTATTT GAATTGGTTATTACAGAGGCCAGGCCAGTCTCCAAAACGCCTAATCTATCTGGTGT CTAAATTGGACTCTGGAGTCCCTGACAGGTTTCAGTGGCAGTGGATCAGGGACAGAT TTCACACTGAAAATCAGCAGAGTGGAGGCTGAGGATTTGGGAGTTTATTACTGCTT GCAGAGTACACATTTTCCGCTCACGTTTCGGTGTGGGACCAAGCTGGAGCTGAAAC GGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAG TCTGGCACCGCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAA GGTGCAGTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGT GACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCCTG AGCAAGGCCGACTACGAGAAGCACAAAGGTGTACGCCTGCGAGGTGACCCACCAGG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA

FIG. 40 cont.

133/185

Antibody	SEQ ID NO:	LC nucleic acid sequence
7D8.2D8 (7D8)	359	GATGTTTTGATGACCCAACTCCACTCTCCCTGCCTGTCAGTCTTGGAGATCAAGCC TCCATCTCTTGCAGATCTAGTCAGAGCATTGTACATAGTAATGGAAACACCTATTT AGAATGGTACCTGCAGAAACCAGGCCAGTCTCCAAAGCTCCTGATCTACAAAGTTT CCAACCGATTTTCTGGGGTCCAGACAGGTTTCACTGGCAGTGGATCAGGGACAGAT TTCACACTCAAGATCAGCAGAGTGGAGGCTGAGGATCTGGGAGTTTATTACTGCTT TCAAGGTTTACATGTTCCGCTCACGTTTCGGTGCTGGGACCAAGCTGGAGCTGAAAC GGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAG TCTGGCACCGCCAGCGTGGTGTGCTGCTGAACAACCTTCTACCCCCGCGAGGCCAA GGTGCAGTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGT GACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCTG AGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCTGCGAGGTGACCCACCAGG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
F846C.1B2	360	AACATTTGGTTGACACAGTCGCCATCATCTCTGGCTGTGTCTGCAGGAGAAAATGGT CACTATGACCTGTAAGTCCAGTCAAAGTGTTTTATACAGTTCAAATCAGAAGAAGT ACTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATCTACTGG GCATCCACTAGGGAATCTGGTGTCCCTGATCGCTTACAGGCAGTGGATCTGGGAC AGACTTTTCTCTTACCATCAGCAGTGTACAAGCTGAAGACCTGGCAGTTTATTACT GTCATCAATATCTCTCCTCGCTCACGTTTCGGTGCTGGGACCAAGCTGGAGCTGAAA CGGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAA GTCTGGCACCGCCAGCGTGGTGTGCTGCTGAACAACCTTCTACCCCCGCGAGGCCA AGGTGCAGTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCG TGACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCCT GAGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCTGCGAGGTGACCCACCAG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
F846C.1F5 (846.1F5)	361	AACATTATGATGACACAGTCGCCATCATCTCTGGCTGTGTCTGCAGGAGAAAAGGT CACTATGAGCTGTAAGTCCAGTCAAAGTGTTTTATACAGTTCAAATCAGAAGAAGT ACTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAACTGCTGATCTACTGG GCATCCACTAGGGAATCTGGTGTCCCTGATCGCTTACAGGCAGTGGATCTGGGAC AGATTTTACTCTTACCATCAGCAGTGTACAACCTGAAGACCTGGCAGTTTATTACT GTCATCAATACCTCTCCTCGCTCACGTTTCGGTGCTGGGACCAAGCTGGAGCTGAAA CGGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAA GTCTGGCACCGCCAGCGTGGTGTGCTGCTGAACAACCTTCTACCCCCGCGAGGCCA AGGTGCAGTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCG TGACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCCT GAGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCTGCGAGGTGACCCACCAG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
F846C.1H12 (846.1H12)	362	AACATTATGATGACACAGTCGCCATCATCTCTGGCTGTGTCTGCAGGACAAAAGGT CACTATGAGCTGTAAGTCCAGTCAAAGTGTTTTATACAGTTCAAAGTCAAGAAGT ACTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAACTTCTGATCTACTGG GCATCCACTAGGGAATCTGGTGTCCCTGATCGCTTCTCAGGCAGTGGATCTGGGAC AGATTTTACTCTTACCATCAGCAGTGTACAACCTGAAGACCTGGCAGTTTATTACT GTCATCAATACCTCTCCTCGCTCACGTTTCGGTGCTGGGACCAAGCTGGAGCTGAAA CGGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAA GTCTGGCACCGCCAGCGTGGTGTGCTGCTGAACAACCTTCTACCCCCGCGAGGCCA AGGTGCAGTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCG TGACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCCT GAGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCTGCGAGGTGACCCACCAG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA

FIG. 40 cont.

134/185

Antibody	SEQ ID NO:	LC nucleic acid sequence
F846C.1H5 (846.1H5)	363	GATGTTGTGATGACCCAAACTCCACTCTCCCTGCCTGTGAGTCTTGGAGATCAAGC CTCCATCTCTTGCAGATCTAGTCAGAGCCTTGTACACAATAGTGGAACACCTATT TACATTGGTACCTGCAGAGGCCAGGCCAGTCTCCAAACCTCCTGATCTACAAAGTT TCCAACCGATTTTCTGGGGTCCCAGACAGGTTTCAGTGGCAGTGGATCAGGGACAGA TTTCACACTCAAGATCAGCAGAGTGGCGGCTGAGGATCTGGGAGTTTATTTCTGCT CTCAAAGTACACATGTTCTCCGACGTTTCGGTGGAGGCCACCAAGCTGGAAATCAAA CGGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAA GTCTGGCACC GCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCA AGGTGCAGTGGAAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCG TGACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCCT GAGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAG GGAAGTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAAGGA
F846C.2H3 (846.2H3)	364	AACATTATGATGACACAGTCGCCATCATCTCTGGCTGTGTCTGCAGGAGAAAAGGT CACTATGAGCTGTAAGTCCAGTCAAAGTGTTTTATACAGTTCAAATCAGAAGAAGT ACTTGGCCTGGTACCAGCAGAAAACAGGGCAGTCTCCTAAACTGCTGATCTACTGG GCATCCACTAGGGAATCTGGTGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGAC AGATTTTACTCTTACCATCAGCAGTGTACAACCTGAAGACCTGGCAGTTTATTACT GTCATCAATACCTCTCCTCGCTCACGTTTCGGTGTGGGACCAAGCTGGAGCTGAAA CGGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAA GTCTGGCACC GCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCA AGGTGCAGTGGAAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCG TGACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCCT GAGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAG GGAAGTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
F846TC.14A2 (846T.14A2)	365	CAGGCTGTGTGACTCAGGAATCTGCACTCACCACATCACTGGTGAAACAGTCAC ACTCACTTGTGCTCAAGTACTGGGGCTGTTACAACCTAGTAACTATGCCAACTGGG TCCAAGAAAAACCAGATCATTTATTAAGTGGTATCAATAACCGA GTTCCAGGTGTTCTGCGAGATTCTCAGGCTCCCTGATTGGAGACAAGGAGAGCCCT CACCATCACAGGGGCACAGACTGAGGATGAGGCAATATATTTCTGTGCTCTATGGT ATAGCAACCATTGGGTGTTTCGGTGGAGGAACCAAACTGACTGTCTACGGACCGTG GCCGCCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAAGTCTGGCAC CGCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAGGTGCAGT GGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGC AGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCCTGAGCAAGGC CGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCT AGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
F846TC.14E4 (846T.14E4)	366	GATATTGTGATGACGCAGGCTGCATTCTCCAATCCAGTCACTCTTGGAAACATCAGC TTCCATCTCCTGCAGGTCTAGTAAGAGTCTCCTACATACTAATGGCATCACTTTTTT GTATTGGTATCTGCAGAAGCCAGGCCAGTCTCCTCAGCCCCCTGATTTATCAGATGT CCAACCTTGCCTCAGGAGTCCCAGACAGGTTTCAGTAGCAGTGGGTGAGAACTGAT TTCACACTGAGAATCAGCAGAGTGGAGGCTGAGGATGTGGGTGTTTATTACTGTGC TCAAAATCTAGAACTTCTTGGACGTTTCGGTGGAGGCACCAAGCTGGAAATCAATC GGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAG TCTGGCACCGCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAA GGTGCAGTGGAAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGT GACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCCTG AGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA

FIG. 40 cont.

135/185

Antibody	SEQ ID NO:	LC nucleic acid sequence
F846TC.16B5 (846T.16B5)	367	AACATTATGATGACACAGTCGCCATCATCTCTGGCTGTGTCTGCAGGAGAAAAGGT CACTATGAGCTGTAAGTCCAGTCAAAGTGTTTATACAGTTCAAATCAGAAGAAGT ACTTGGCCTGGTACCAGCAGAAACCAGGGCAGTCTCCTAAACTACTGATCTACTGG GCATCCACTAGGGAATCTGGTGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGAC AGATTTTACTCTTACCATCAGCAGTGTACAAGCTGAAGACCTGGCAGTTTATTACT GTCATCAATACCTCTCCTCGCTCACGTTCCGGTGCTGGGACCAAGCTGGAGCTGAAA CGGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAA GTCTGGCACCGCCAGCGTGGTGTGCCTGTGTAACAACCTTCTACCCCGCGAGGCCA AGGTGCAGTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCG TGACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCCT GAGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAG GGACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
F846TC.7F10 (846T.7F10)	368	GACATTGTGATGACACAGTCTCCATCCTCCCTGGCTATGTCAGTAGGACAGAAGGT CACTATGAGCTGCAAGTCCAGTCAGAGCCTTTTAAATAGTAGCAATCAAAGAAGT ATTTGGCCTGGTACCAGCAGAAACCAGGACAGTCTCCTAAACTTCTGGTATACTTT GCATCCACTAGGGAATCTGGGGTCCCTGATCGCTTCATAGGCAGTGGATCTGGGAC AGATTTTACTCTTACCATCAGCAGTGTGCAGGCTGAAGACCTGGCAGATTACTTCT GTCAGCAACATTATAGCACTCCGTACACGTTTCGGAGGGGGGGCCAAAGCTGGAAAT AAAACGGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGC TGAAGTCTGGCACCGCCAGCGTGGTGTGCCTGTGTAACAACCTTCTACCCCGCGAG GCCAAGGTGCAGTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAG AGCGTGACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGA CCCTGAGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCA CCAGGGACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
F847C.10B9 (847.10B9)	369	GACATCCGGATGACTCAGTCTCCATCCAGTCTGTCTGCATCCCTTGGAGACACAAT TACCATCACTTGCCATGCCAGTCAGAACATTAATGTTTGGTTAAGCTGGTACCAGC AGAAACCAGGAAATATTCCTAAACTATTGATCTATAAGGCTTCCAACCTGCACACA GGCGTCCCATCAAGGTTTAGTGGCAGTGGATCTGGAACAGGTTTCACATTAACCAT CAGCAGCCTGCAGCCTGAAGACATTGCCACTTACTACTGTCAACAGGGTCAAAGTT ATCCGTACACGTTTCGGAGGGGGGACCAAGCTGGAGCTGAAACGGACCGTGGCCGC CCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCGCCA GCGTGGTGTGCCTGTGTAACAACCTTCTACCCCGCGAGGCCAAGGTGCAGTGGA GGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGA CTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCTGAGCAAGGCCGAC TACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCTAGCC CCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
F847C.11B1 (847.11B1)	370	GAAATTGTGTTGACCCAGTCTCCAGCATCCCTGTCCGTGACTACAGGAGAAAAAGT CACTATCAGATGCATAACCAGCATTGATATTGATGATGATGAACTGGTACCAGC AGAAGCCAGGGGAACCTCCTAAGCTCCTTATTTTCAAGAAGGCAATACTCTTCGTCCT GGAGTCCCATCCCGATTCTCCAGCAGTGGCTATGGCACAGATTTTGTTTTACAATT GAAAACACGCTCTCAGAAGATGTTGCAGATTACTACTGTTTGCAAAGTGATAACAA GCCTCTCACGTTCCGGTGTGGGACCAAGCTGGAGCTGAAACGGACCGTGGCCGCC CCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCGCCAGC GTGGTGTGCCTGTGTAACAACCTTCTACCCCGCGAGGCCAAGGTGCAGTGGAAGGT GGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGACTCC AAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCTGAGCAAGGCCGACTACG AGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCTAGCCCCGT GACCAAGAGCTTCAACCGGGGCGAGTGCTAA

FIG. 40 cont.

136/185

Antibody	SEQ ID NO:	LC nucleic acid sequence
F847C.12F12 (847.12F12)	371	GACATCCAGGTGATTTCAGTCTCCATCCAGTCTGTCTGCATCCCTTGGAGACACAAT TACCATCACTTGCCATGCCAGTCAGAACATTAATGTTTGGTTAAGCTGGTACCAGC AGAAACCAGGAAATATTCCCTAAACTATTGATCTATAAGGCTTCCAACCTGCACACA GGCGTCCCATCAAGGTTTTCAGTGGCAGTGGATCTGGAACAGGTTTCACATTAACCAT CAGCAGCCTGCAGCCTGAAGACATTGCCACTTACTACTGTCAACAGGGTCAAAGTT ATCCGTACACGTTTCGGAGGGGGGACCAAGCTGGAGCTGAAAACGACCGTGGCCGC CCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCGCCA GCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAGGTGCAGTGGAA GGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGA CTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAGGCCGAC TACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCTAGCC CCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
F847C.26F5 (847.26F5)	372	GAAATTAAGATGAACCAGTCTCCATCCAGTCTGTCTGCATCCCTTGGAGACACAAT TACCATCACTTGCCATGCCAGTCAGAACATTAATGTTTGGTTAAGCTGGTACCAGC AGAAACCAGGAAATATTCCCTAAACTATTGATCTATAAGGCTTCCAACCTGCACACA GGCGTCCCATCAAGGTTTTCAGTGGCAGTGGATCTGGAACAGGTTTCACATTAACCAT CAGCAGCCTACAGCCTGAAGACATTGCCACTTACTACTGTCAACAGGGTCAAAGTT ATCCGTACACGTTTCGGAGGGGGGACCAAGCTGGAGCTGAAAAGGACCGTGGCCGC CCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCGCCA GCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAGGTGCAGTGGAA GGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGA CTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAGGCCGAC TACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCTAGCC CCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
F847C.4B10 (847.4B10)	373	CAGGCTGTGTGACTCAGGAATCTGCACTCACCACATCACCTGGTGAAACAGTCAC ACTCACTTGTGCTCAAGTACTGGGGCTGTTACAACCTAGTAACTATGCCAACTGGG TCCAAGAAAAACCAGATCATTTATTCACTGGTCTAATAGGTGGTACCAACAACCGA GCTCCAGGTGTTCCTGCCAGATTCTCAGGCTCCCTGATTGGAGACAAGGCTGCCCT CACCATCACAGGGGCACAGACTGAGGATGAGGCAATATATTTCTGTGCTCTATGGT ACAGCAACCATTTCAGTGTTCGGTGGAGGAACCAAACTGACTGTCCTAAGGACCGTG GCCGCCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCAC CGCCAGCGTGGTGTGCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAGGTGCAGT GGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGC AGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAGGC CGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCT AGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
F849C.8D10 (849.8D10)	374	GATGTTTTGATGACCCAAACTCCACTCTCCCTGCCTGTCAGTCTTGGAGATCAAGCC TCCATCTCTTGAGATCTAGTCAGGACATTGTGCATAGTAGTGAAACACCTATTT AGAATGGTACCTGCAGAAACCAGGCCAGTCTCTAAAGCTCCTGATTTACAAAGTTT CCAACCGATTTTCTGGGGTCCCAGACAGGTTTCAGTGCCAGTGGATCAGGGACAGAT TTCACACTCAAGATCAGCAGAGTGGAGGCTGAGGATCTGGGAGTTTATTACTGCTT TCAAGGTTACATGTTTCTCCACGTTTCGGCTCGGGGACAAAGTTGGAAATAAAAC GGACCGTGGCCGCCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAG TCTGGCACCGCCAGCGTGGTGTGCTGCTGAACAACCTTCTACCCCCGCGAGGCCAA GGTGCAGTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGT GACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTG AGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA

FIG. 40 cont.

137/185

Antibody	SEQ ID NO:	LC nucleic acid sequence
F849C.8H3	375	GATATTGGGATGAGGCAGGCTGCATTCTCCAATCCAGTCACTCTTGGAACATCAGC TTCCATCTCCTGCAGGTCTAGTAAGAGTCTCCTATATAGTAATGGCATCACTTATTT GTATTGGTTTCTCCAGAAGCCAGGCCAGTCTCCTCAGCTCCTGATTTATCAGATGTC CAACCTTGCTCAGGAGTCCCAGACAGGTTTCAGTAGCAGTGGGTTCAGGAACCTGATT TCACACTGAGAATCAGCAGAGTGGAGGCTGACGATGTGGGTGTTTATTACTGTGCT CAAAATCTAGAACTTCCGTGGACGTTCCGTGGAGGCACCAAGCTGGAAATCAAAC GGACCGTGGCCGCCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAG TCTGGCACCGCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAA GGTGCAGTGGAAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGT GACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCTG AGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
846.2B11	554	GACATTGTGCTGACACAGTCTCCTGCTTCCTTAGGTGTTTCTCTGGGGCAGAGGGC CACCATCTCATGCAGGGCCAGCAAAAGTGTCTAGTACATCTGGCTATAGTTATATGC ACTGGTACCAACAGAAACCAGGACAGCCACCCAACTCCTCATCTATCTTGCATCC ATCCTAGAATCTGGGGTCCCTGCCAGGTTTCAGTGGCAGTGGGTCTGGGACAGACTT CACCTCAACATCCATCCTGTGGAGGAGGAGGATGCTGCAATCTATTACTGTCTCAGC ACAGTAGGGAGCTTCCTCTCACGTTTCGGTGTGGGACCAAGCTGGAGCTGAAACG GACCGTGGCCGCCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGT CTGGCACCGCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAG GTGCAGTGGAAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTG ACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCCTGA GCAAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGGG ACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
846.4D5	555	AACATTGTGCTGACCCAATCTCCAGCTTCTTTGGCTGTGTCTCTAGGGCAGAGGGC CACCATATCCTGCAGAGCCAGTGAAAGTGTGATAGTTATGGCAATAGTTTATATGC ACTGGTACCAGCAGAAACCAGGACAGCCACCCAACTCCTCATCTATCTTGCATCC AACCTAGAAATCTGGGGTCCCTGCCAGGTTTCAGTGGCAGTGGGTCTAGGACAGACTT CACCTCACCATTGATCCTGTGGAGGCTGATGATGCTGCAACCTATTACTGTCTCAGC AAAATAATGAGGATCCGTGGACGTTCCGTGGAGGCACCAAGCTGGAAATCAAACG GACCGTGGCCGCCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGT CTGGCACCGCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAG GTGCAGTGGAAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTG ACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCCTGA GCAAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGGG ACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
847.14H4	556	CAGGCTGTTGTGACTCAGGAATCTGCACTCACCACATCACCTGGTGAACAGTCAC ACTCACTTGTGCTCAAGTACTGGGGCTGTTACAACCTAGTAACCTATGCCAACTGGG TCCAAGAAAAACCAGATCATTTATTCACTGGTCTAATAGGTGGTACCAACAACCGA GCTCCAGGTGTTCTGCCAGATTCTCAGGCTCCCTGATTGGAGACAAGGCTGCCCT CACCATCACAGGGGCACAGACTGAGGATGAGGCAATATATTTCTGTGCTCTATGGT ACAGCAACCATTAGTGTTCGGTGGAGGAACCAAACTGACTGTCCTAAGGACCGTG GCCGCCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCAC CGCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAGGTGCAGT GGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGC AGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCCTGAGCAAGGC CGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGGACTGTCT AGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA

FIG. 40 cont.

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Antibody	SEQ ID NO:	LC nucleic acid sequence
846T.1H2	557	GATGTTGTGATGACCCAGACTCCACTCACTTTGTCTGGTTACCATTTGGACAACCAGC CTCTATCTCTTGCAAGTCAAGTCAGAGTCTCTTATATAGTAATGGAAAAACCTATTT GAATTGGTTATTACAGAGGCCAGGCCAGTCTCCAAAGCGCCTAATCTATCTGGTGT CTAAACTGGACTCTGGAGTCCCTGACAGGTTCACTGGCAGTGGATCAGGAACAGAT TTTACACTGAAAAATCAGCAGAGTGGAGGCTGAGGATTTGGGAGTTTATTACTGCGT GCAAGGTACACATTTTCCTCAGACGTTCTGGTGGAGGCCACCAAGCTGGAAATAAAa GGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAG TCTGGCACCCGCCAGCGTGGTGTGCTTGAACAACCTTCTACCCCCGCGAGGCCAA GGTGCAGTGGAAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGT GACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCTG AGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCTTGCAGGTGACCCACCAGG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
mIMT001	558	GATATTGTTATTACTCAGGATGAGCTTAGTAATCCTGTCACTAGCGGGGAAAGTGT TAGTATCAGTTGTCTTCATCCAAGTCACTCCTCTACAAAGACGGCAAGACTTATC TCAACTGGTTTCTTCAACGACCCGGTCAATCTCCACAGCTCCTGATTACCTGATGT CAACTCACGCTTCTGGTGTAGCGACCGTTTCTCCGGAAGTGGCTCCGGGACAGAC TTCACTCTTGAAATCTCACGTGTAAAAGCAGAGGACGTAGGTGTCTATTATTGTCA ACAGCTTGTGGACTACCCCTTGACCTTTGGCGCTGGCACAAGCTGGAACTGAAGC GTGCTGATGTTGCCCTACTGTGTCCATCTTCCCCCTCCTCCGAGCAGCTGACAT CCGGCGGCGCCTCCGTGGTGTGCTTCTGAACAACCTTCTACCCCAAAGACATCAAC GTGAAATGGAATTCGACGGCTCCGAGAGGCGAGAACGGCTGTGCTGAACCTCTGGA CAGACCAGGACTCCAAAGACTCCACATACTCCATGTCTCCACACTGACACTGACA AAAGACGAGTACGAGAGGCACAACCTCTACACATGCGAGGCCACACACAAAACAT CCACATCCCCCATCGTGAAATCCTTCAACAGGAACGAGTGCTAATAA
4A11.2B5	559	GACATTGTGATGACTCAGGCAGCCTTTTCCAACCCTGTAACTTGGAACTAGTGC CTCCATCTCATGCCGTTCCAGCAAGAGTCTTTTGCACAGCGATGGGATAACCTATC TCTATTGGTATCTGCAACGACCCGGTCAGTCACCCCAACTTCTTATCTATCGAATGT CTAACTTGGCCTCCGGCGTGCCCGACCGCTTTTCCGGGAGTGGGAGCGGTACAGAT TTCACCTTGCGAATTTCCCGGGTTGAGGCAGAGGACGTAGGTGTCTACTATTGTGC TCAGATGCTTGAGTTTCTCTCACTTTCGGAGCCGGCACCAACTGGAAGTGAAC GGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAG TCTGGCACCCGCCAGCGTGGTGTGCTTGAACAACCTTCTACCCCCGCGAGGCCAA GGTGCAGTGGAAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGT GACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCTG AGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCTTGCAGGTGACCCACCAGG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
4A11.H1L1	560	GATATAGTGATGACCCAAACACCTTTGTCCCTGTCAGTCACCCAGGCCAACCCGC ATCTATCTCATGCAAATCCTCAAAAAGTCTTTTGCAGTCTGACGGGATAACATATCT CTACTGGTATCTTCAAAAACCTGGTCAGTCCCCCAGCTCTTGATCTATAGAATGA GTAACCTTGCCCTCTGGTGTCCCCGACCGGTTTAGTGGAAGCGGGTCTGGGACCGAC TTCACCTCAAGATTAGTCGCGTGAAGCCGAAGATGTGGGAGTGTATTACTGTGC CCAGATGCTCGAATTTCCCTGACATTTGGTCAAGGAACTAAATTGGAGATTAAAGC GGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAG TCTGGCACCCGCCAGCGTGGTGTGCTTGAACAACCTTCTACCCCCGCGAGGCCAA GGTGCAGTGGAAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGT GACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCTG AGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCTTGCAGGTGACCCACCAGG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA

FIG. 40 cont.

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Antibody	SEQ ID NO:	LC nucleic acid sequence
4A11.H4L2	561	GATATTGTAATGACCCAAAGCCCCCTGTCCTTGCTGTTACCCAGGTGAGCCTGC CAGCATATCTTGCCGATCCAGTAAATCTCTGCTTCATAGCGATGGCATCACCTATTT GTATTGGTATTTGCAGAAGCCCGCCAGAGCCCCAGTTGCTGATCTACAGAAATGT CCAACCTTGCTAGTGGAGTGCCCGACCGGTTTAGCGGTTCAAGGCTCAGGGACTGAT TTCACCTCTTAAATCAGTAGGGTAGAGGCCGAAGACGTTGGTGTATATTATTGTGC TCAGATGTTGGAGTTTCCACTCACATTTGGACAAGGTACAAAGCTGGAAATTAAGC GGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAG TCTGGCACCGCCAGCGTGGTGTGCTGCTGAACAACCTTACCCCCGCGAGGCCAA GGTGCAGTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGT GACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCTG AGCAAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
4G2.2G6	562	GATGTCGTAATGACTCAAAACCCCTGACCCCTAGTGTTACTATAGGCCAGCCCCG AAGCATCTCCTGCAAATCCTCCCAGTCTCTTCTTTATACTGATGGCAAACCTACTT GTCCTGGTTTTTGCAGCGCCAGGTCAAAGTCTTAAACGCTTATTTACTTGGTCTC TAAACTCGATTCCGCGCTGCCTGACCGGTTCTCCGGTAGCGGTAGCGGTACCGATT TCACCTTGAAGATTAGCCGAGTTGAGGCAGAAGACCTCGGGGTCTACTACTGCCTT CAGAGTACACACTTCCCCTTACATTTGGCGCAGGAACCAAGTTGGAGGTTAAACG GACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGT CTGGCACCGCCAGCGTGGTGTGCTGCTGAACAACCTTACCCCCGCGAGGCCAAG GTGCAGTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTG ACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCTGA GCAAGGCCGACTACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGGG ACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
6B3.2D3	563	AGTATTGTGATGACCCAGACTCCCAAATTCCTGCTTGTATCAGCAGGAGACAGGGT TACCATAACCTGCAAGGCCAGTCAGAGTGTGAGTAATGATGTAGCTTGGTACCAAC AGAAGCCAGGGCAGTCTCCTAAATTGTTGATATATTATGCATCCAATCGCTACACT GGAGTCCCTGATCGCTTCACTGGCAGTGGATATGGGACGGATTTCACCTTACACCT CAGCACTGTGCAGGCTGAAGACCTGGCAGTTTATTTCTGTGCAGCAGGATTATACCT CTCCGTACACGTTCCGAGGGGGGACCAAGCTGGAAATAAAACGACCGTGGCCGC CCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCGCCA GCGTGGTGTGCTGCTGAACAACCTTACCCCCGCGAGGCCAAGGTGCAGTGGA GGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGA CTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAGGCCGAC TACGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCTAGCC CCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
6H6.2D6	564	GACATCCAGATGACCCAGACCACCTCCTCCCTGTCCGCTCCCTGGGCGACAGGGT GACCATCTCCTGCTCCGCTCCCAGGGCATCTCCAACCTGAACTGGTACCAGC AGAAGCCCCGACGGCACCGTGAAGCTGCTGATCTACTACACCTCCTCCCTGCACTCC GGCGTGCCCTCCAGGTTCTCCGGCTCCGGCTCCGGCACCGACTACTCCCTGACCAT CTCCAACCTGGAGCCCCGAGGACATCGCCACCTACTACTGCCAGCAGTACTCCGAGC TGCCCTACACCTTCGGCTCCGGCACCAAGCTGGAGATCAAGAGGACCGTGGCCGCC CCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCGCCAG CGTGGTGTGCTGCTGAACAACCTTACCCCCGCGAGGCCAAGGTGCAGTGGAAG GTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGACT CCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAGGCCGACTA CGAGAAGCACAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCTAGCCCC GTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA

FIG. 40 cont.

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Antibody	SEQ ID NO:	LC nucleic acid sequence
9H2.2H10	565	GACATTGTGATGACCCAGTCTCACAAATTCATGTCCACATCAGTAGGAGACAGGGT CAGCATCACCTGCAAGGCCAGTCAGGATGTGAGTACTGCTGTAGCCTGGTATCAAC AAAAACCAGGGCAATCTCCTAAACTACTGATTTACTGGGCATCCACCCGGCACACT GGAGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTATACTCTCACCAT CAGCAGTGTGCAGGCTGAAGACCTGGCACTTTATTACTGTCAGCAACATTATACCA CTCCGCTCACGTTTCGGTGTCTGGGACCAAGCTGGAGCTGAAACGGACCGTGGCCGCC CCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCCGCCAG CGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAGGTGCAGTGGAAG GTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGACT CCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAGGCCGACTA CGAGAAGCACAAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCTAGCCCC GTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
13G4.2F8	566	GACATTGTGATGACCCAGTCTCAAAAATTCATGTCCACATCAGTAGGAGAGAGGGT CAGCATCACCTGCAAGGCCAGTCAGAATGTAGGTACTAATGTAGCCTGGTATCAGC AGAAAGCAGGGCAGTCTCTTGAACCTGCTGATCTATGGGGCATCCAACCGGCACACT GGAGTCCCTGATCGCTTCACAGGCAGTGGATCTGGGACAGATTCTACTCTCACCAT CACCAATGTGCAGTCTGAAGACATGACAAATTATTTCTGTGAGCAATATAGCAACT TTCTCTCACGTTTCGGTGTCTGGGACCAAGCTGGAGCTGAAACGGACCGTGGCCGCC CCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCCGCCAG CGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAGGTGCAGTGGAAG GTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGACT CCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAGGCCGACTA CGAGAAGCACAAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCTAGCCCC GTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
13H12.2F8	567	GACGTGTGTATGACACAAACACCACCTTACACTTTCTGTAACATATCGGTCAGCCTGC CTCAATTTTCATGTAAGTCTTCTCAGTCCCTGTTTCATAGCGACGGGAAGACTTACCT GAATTGGCTTCTCCAACGACCAAGGCCAATCACCCAAGCGCCTTATTTATTTGGTCA GTAAATTGGACAGTGGAGTTCCCGATAGATTTACCGGGAGCGGTTCTGGGACCGAT TTCACCCCAAAGATCTCCAGGGTAGAAGACGAAGATCTCGGTGTGTACTATTGCTG GCAGGGGACACATTTCCCTCTGACATTCGGTGTCTGGAACCAAACCTTGAGATGAAAC GGACCGTGGCCGCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAG TCTGGCACCCGCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAA GGTGCAGTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGT GACCGAGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTG AGCAAGGCCGACTACGAGAAGCACAAAGGTGTACGCCTGCGAGGTGACCCACCAGG GACTGTCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
15G7.2A7	568	GACATCCAGATGAACCAGTCTCCATCCAGTCTGTCTGCATCCCTCGGAGACACAAT TTCCATCACTTGCCGTGCCAGTCAGAACATTAATATTTGGTTAAGCTGGTACCAGC AGAAACCAGGAAATATTCCTCAACTATTGATCTATAAGGCTTCCAACCTGCACACA GGCGTCCCTCAAGGTTTAGTGGCAGTGGATCTGGAACAGATTTCACATTAACCAT CAGCAGTCTGCAGCCTGAAGACATTGCCACTTACTACTGTCTACAGGGTCAAAGTT ATCCTCTCACGTTTCGGTGTCTGGGACCAAGCTGGTGATGAAACGGACCGTGGCCGCC CCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCCGCCAG CGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAGGTGCAGTGGAAG GTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGACT CCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAGGCCGACTA CGAGAAGCACAAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCTAGCCCC GTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA

FIG. 40 cont.

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Antibody	SEQ ID NO:	LC nucleic acid sequence
19D9.2E5	569	GATGTTGTGATGACCCAGACTCCACTCACTTTGTCTGGTTACCATTTGGACAACCAGC CTCCATCTCTTGTAAAGTCAAGTCAGAGCCTCTTACATAGTGATGGAAAGACATATT TGAATTGGTTGTTACAGAGGCCAGGCCAGCCTCCAAAGCGCCTAATGTATCTGGTG TCTACACTGGACTCTGGAGTCCCTGACAGGTTCACTGGCAGTGATCAGGGACAGA TTTCACACTGAAAATCAGCAGAGTGGAGGCTGAGGATTTGGGAGTTTATTATTGCT GGCAAGGTACACATTTTCTCTCACGTTTCGGTGCTGGGACCAAGCCGGAGCGGACC GTGGCCGCCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGG CACCGCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAGGTGC AGTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCG AGCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAA GGCCGACTACGAGAAGCACAAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTG TCTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
23B10.2B12	570	GATATTGTGATGACGCGAGGCTGCATTTCTCCAATCCAGTCACTCTTGGAACGTCAGC TTCCATCTCCTGCAGGTCTAGTAAGAGTCTCCTACATAGTGATGGCATCACTTATTT CTATTGGTATCTGCAGAGGCCAGGCCAGTCTCCTCAGCTCCTGATATATCGGATGT CCAACCTTGCCTCAGGAGTCCCAGACAGGTTCACTGGCAGTGGGTGAGGAAGTATGAT TTACACTGAGAATCAGCAGAGTGGAGGCTGAGGATGTGGGTGTTTATTACTGTGC TCAAATGCTAGAAATCCCGCTCACGTTTCGGTGCTGGGACCAAGCTGGAGCGGACCG TGGCCGCCCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGC ACCGCCAGCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAGGTGCA GTGGAAGGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGA GCAGGACTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAG GCCGACTACGAGAAGCACAAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGT CTAGCCCCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA
24D12.2H9	571	GACATTGTGATGACCCAGTCTCACAATTCATGTCCACATCAGTAGGAGACAGGGT CAGCATCACCTGCAAGGCCAGTCAGGATGTGCGTACTGCTGTAGCCTGGTATCAAC AGAAACCAGGGCAATCTCCTAACTACTGATTTACTGGGCATCCACCCGGCACACT GGAGTCCCTGATCGCTTCACAGGCAGTGATCTGGGACAGATTTCACTCTCACCCCT TAGCAATGTGCAGTCTGAAGACTTGGCAGATTATTTCTGTGTCAGCAATATAGTAGTT ATCCGTGGACGTTTCGGTGGAGGCACCAAGCTGGAAATCAAACGGACCGTGGCCGC CCCCAGCGTGTTCATCTTCCCTCCCAGCGACGAGCAGCTGAAGTCTGGCACCGCCA GCGTGGTGTGCCTGCTGAACAACCTTCTACCCCCGCGAGGCCAAGGTGCAGTGGA GGTGGACAACGCCCTGCAGAGCGGCAACAGCCAGGAGAGCGTGACCGAGCAGGA CTCCAAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAGGCCGAC TACGAGAAGCACAAAGGTGTACGCCTGCGAGGTGACCCACCAGGGACTGTCTAGCC CCGTGACCAAGAGCTTCAACCGGGGCGAGTGCTAA

FIG. 40 cont.

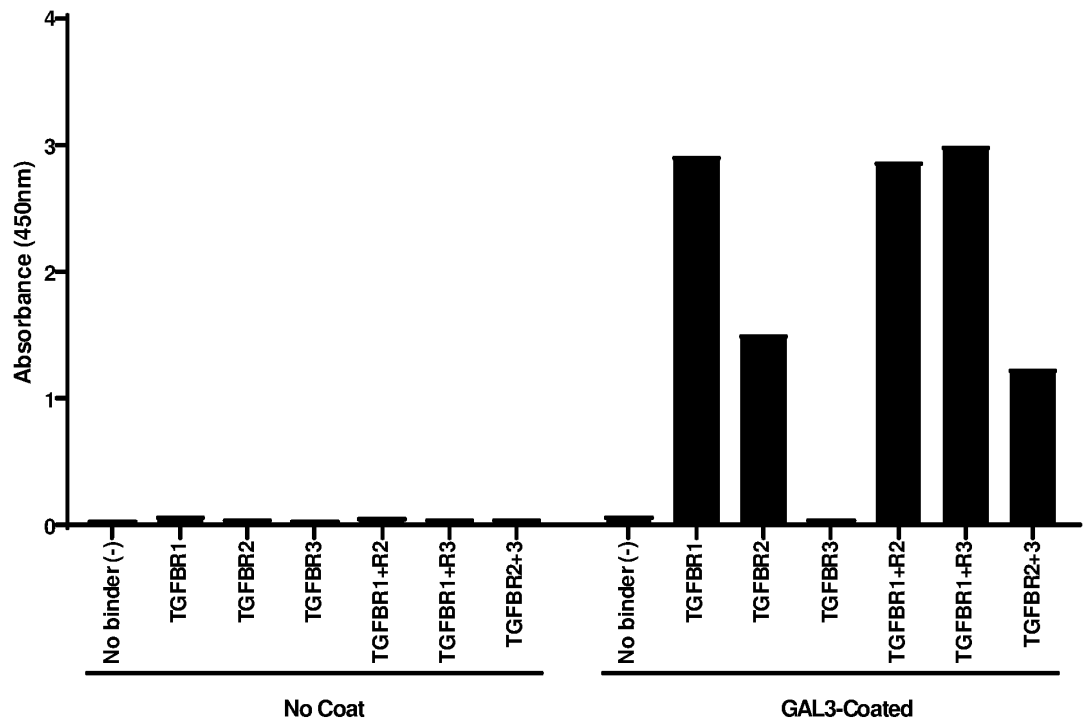


FIG. 41A

Binding parameters between Gal3 and TGF- β receptors

	k_a (1/Ms)	k_d (1/s)	K_D (M)
Gal3: TGFBR1	1.118×10^5	3.512×10^{-2}	314 nM
Gal3: TGFBR2	1.155×10^5	8.373×10^{-2}	725 nM

FIG. 41B

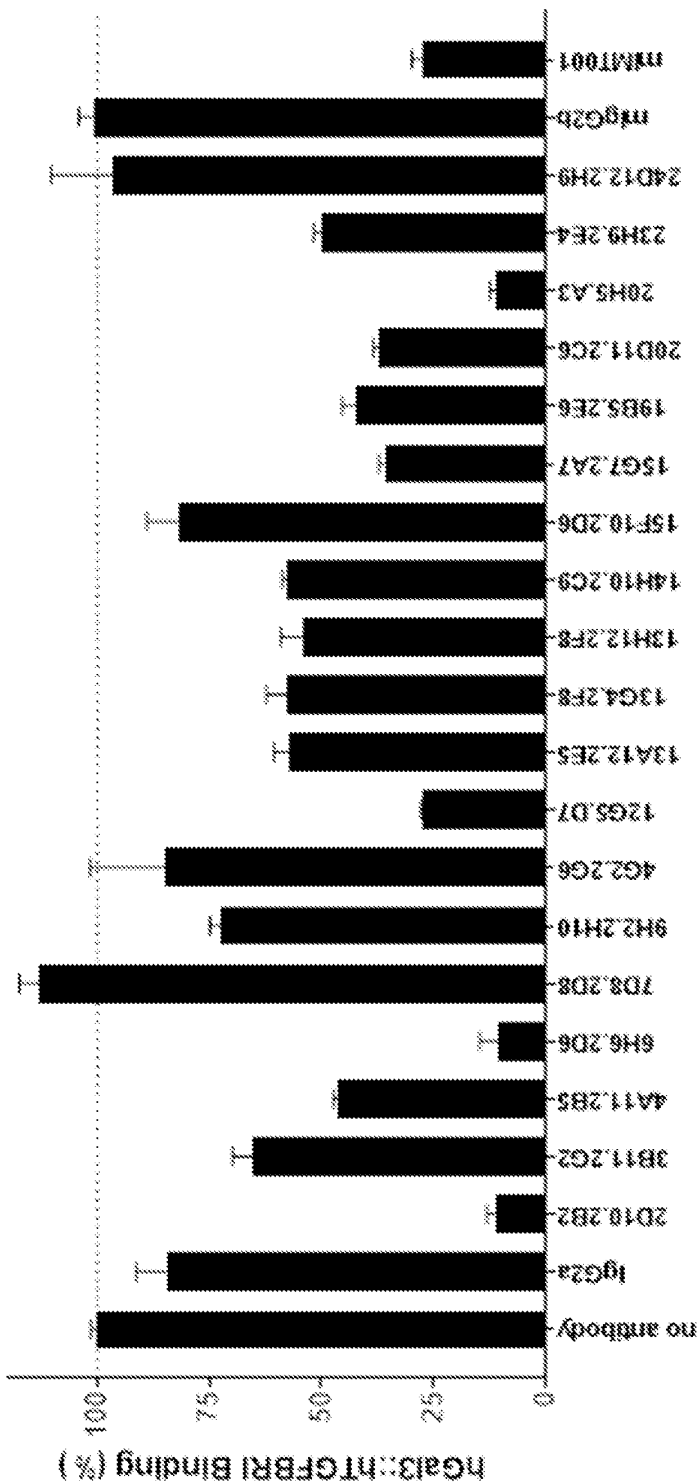


FIG. 42

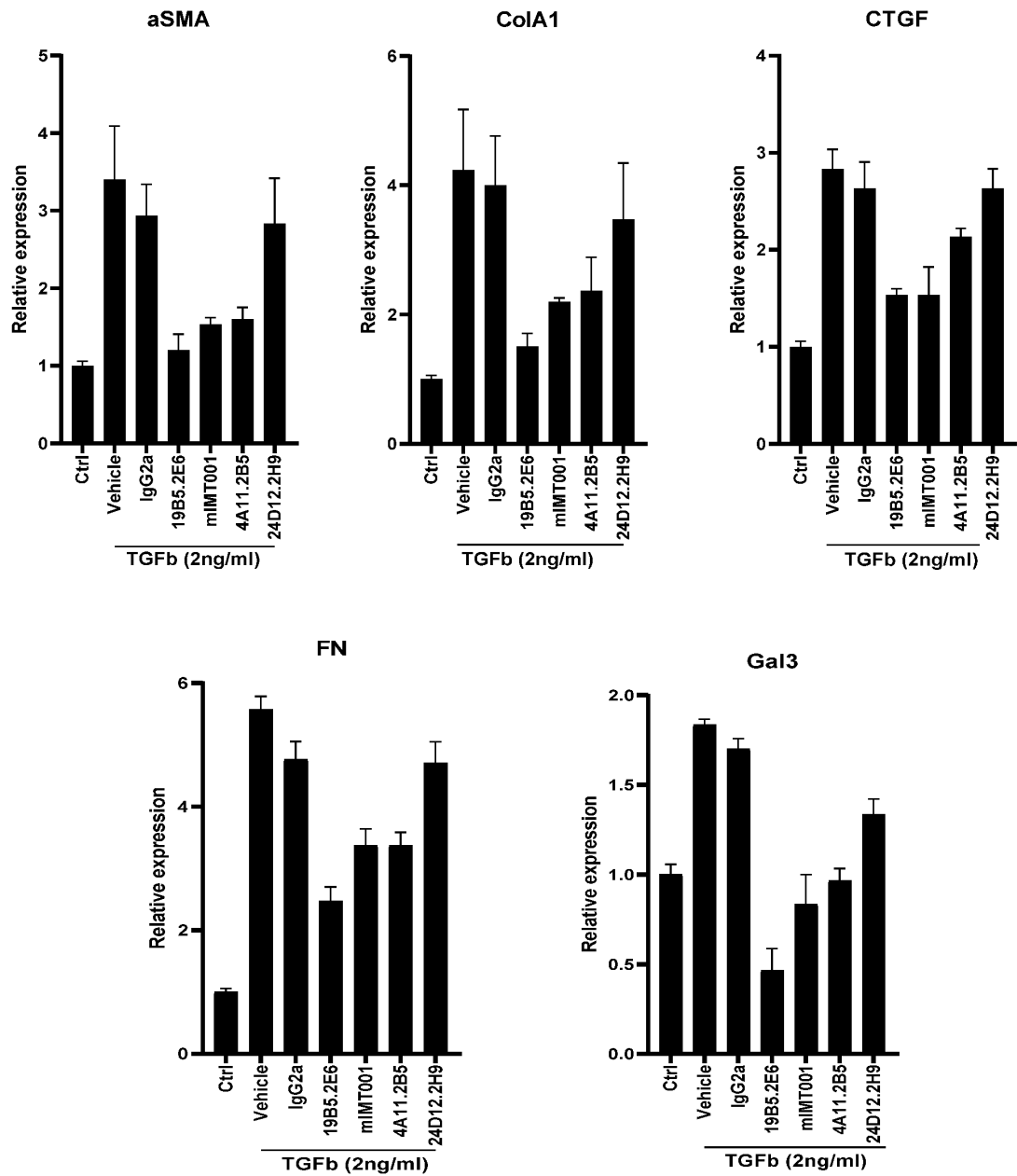


FIG. 43A

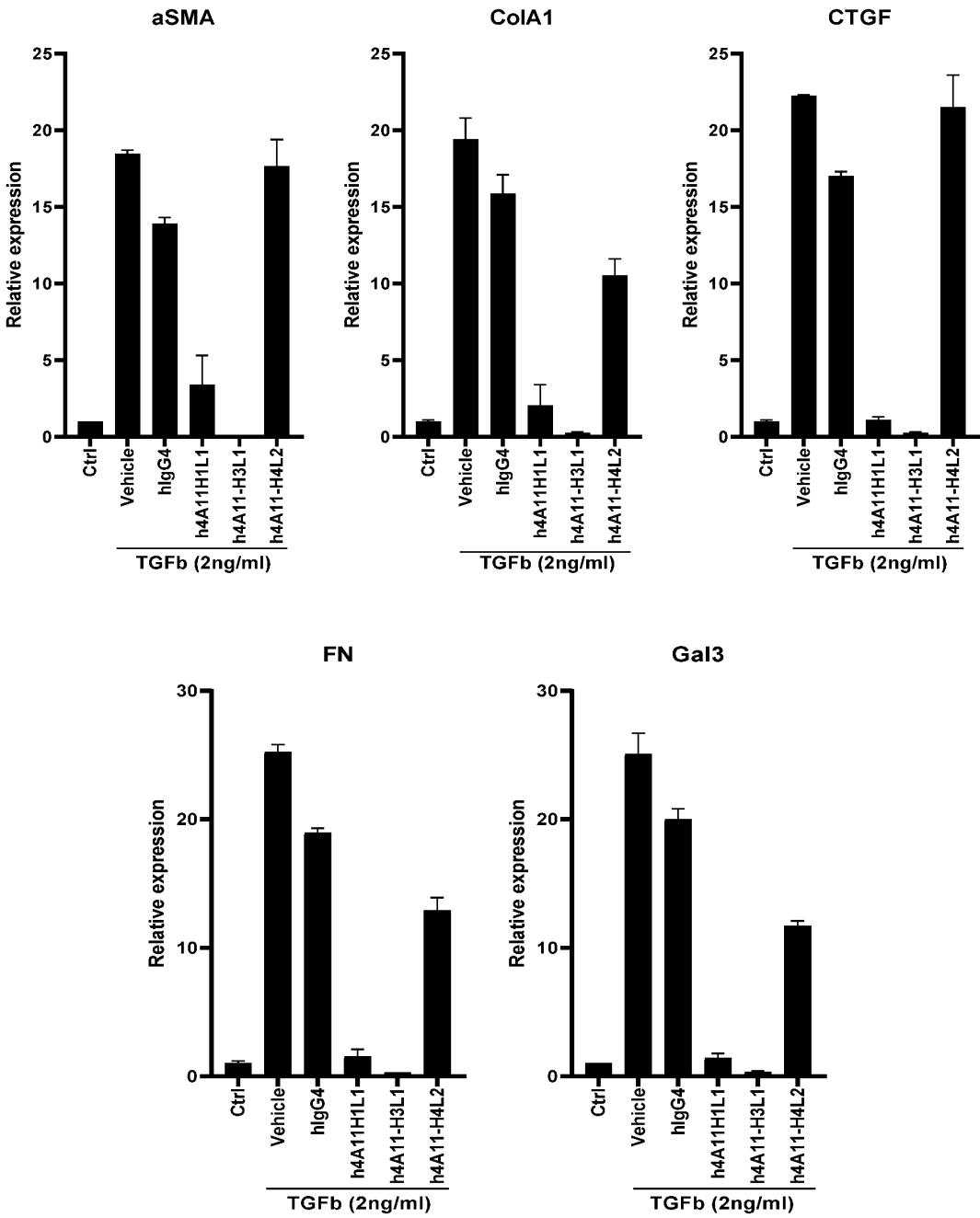


FIG. 43B

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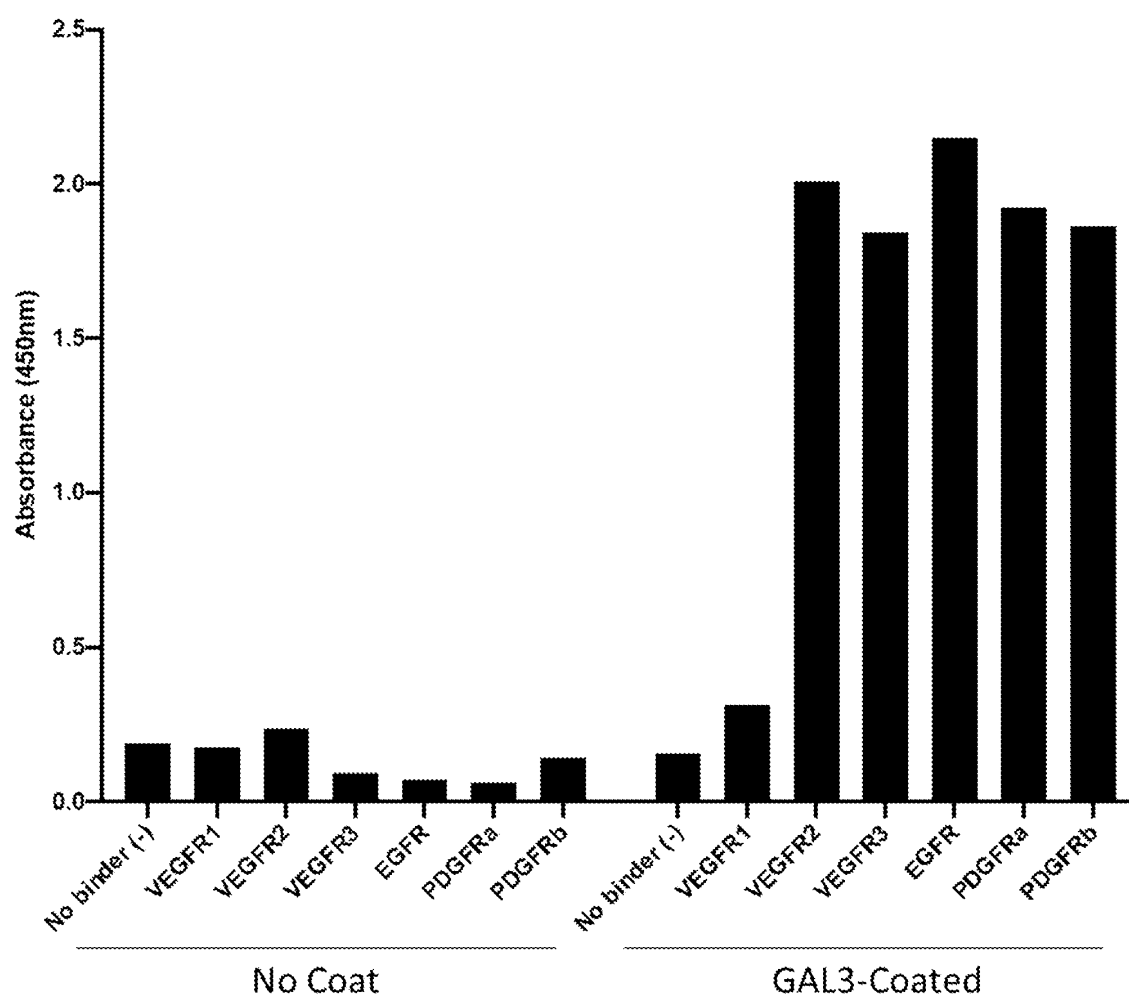


FIG. 44A

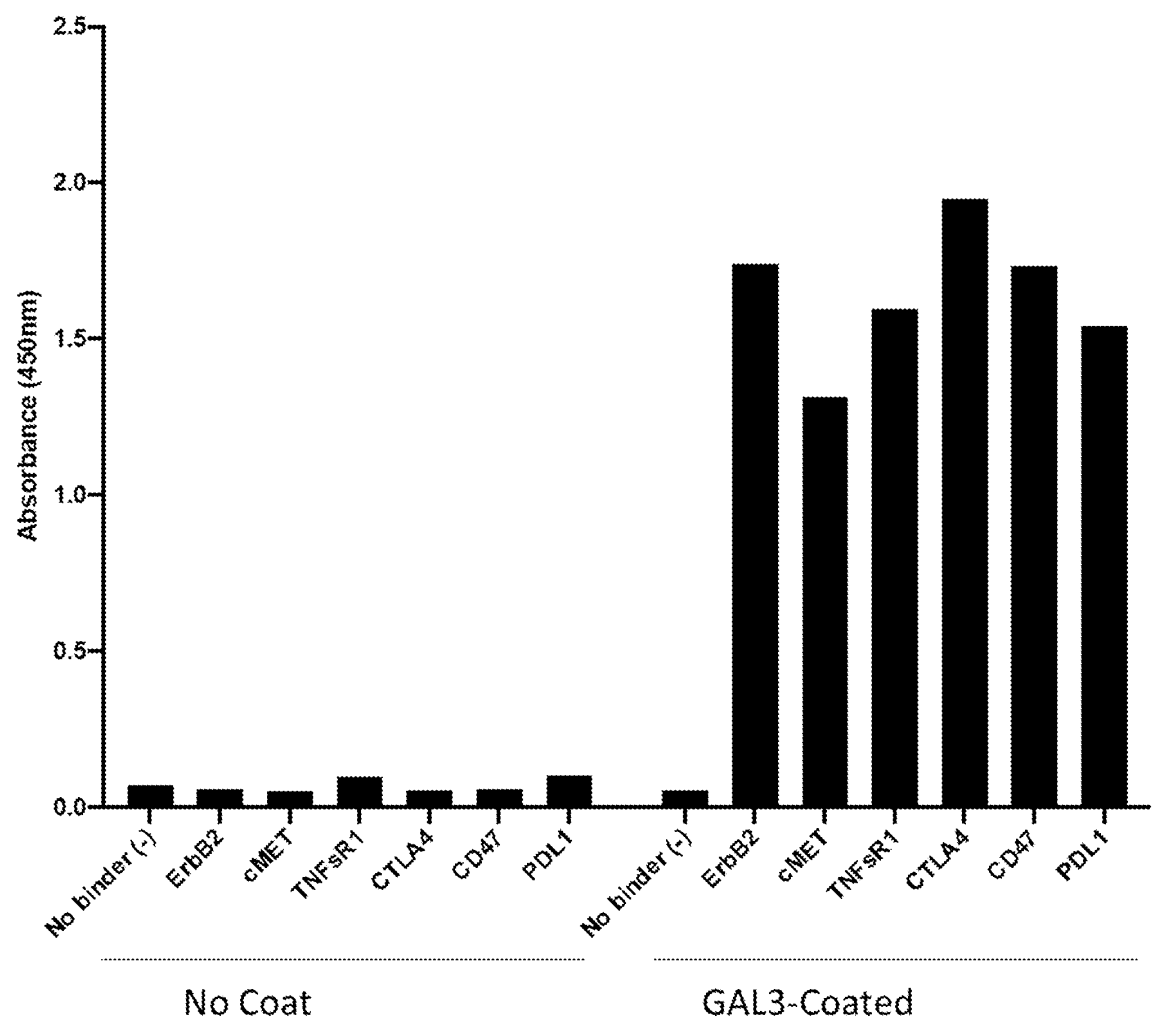


FIG. 44B

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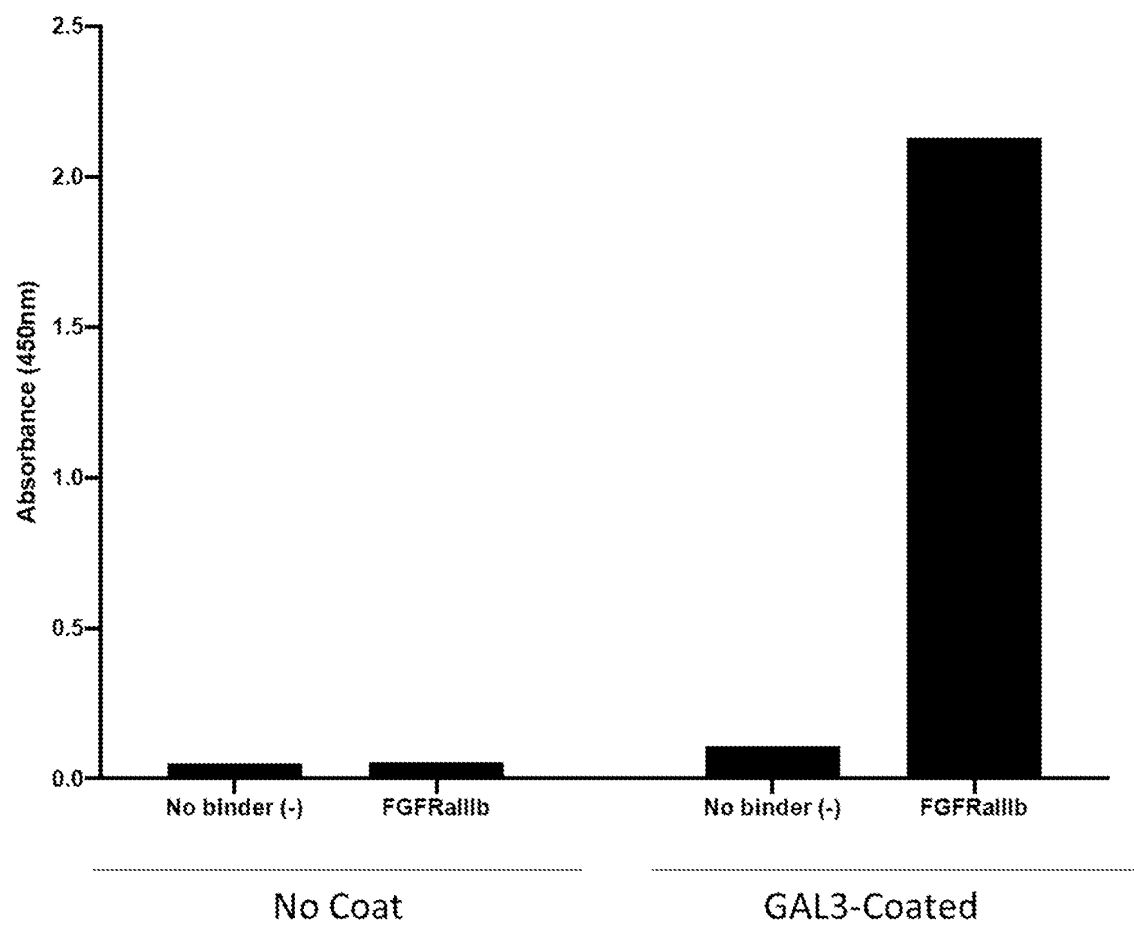


FIG. 44C

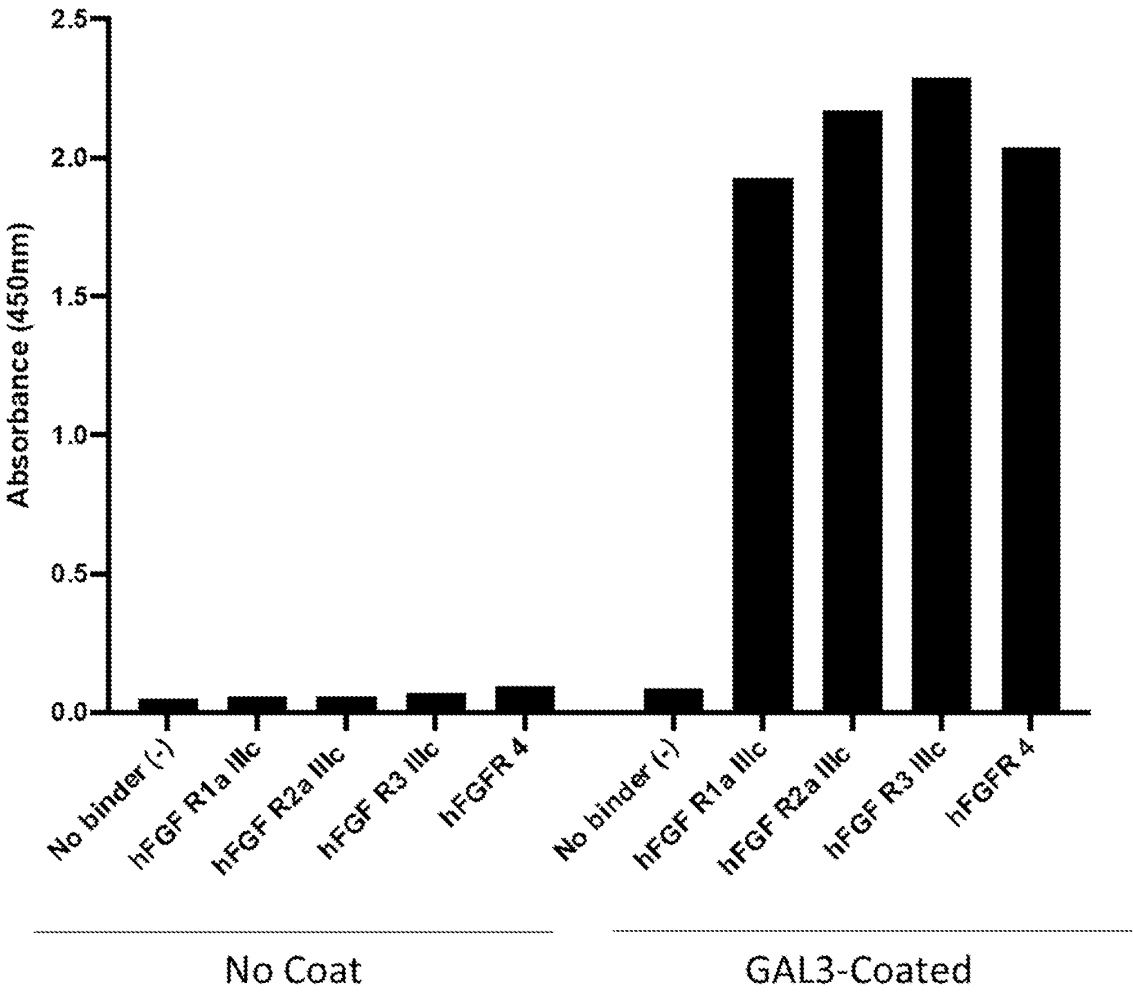
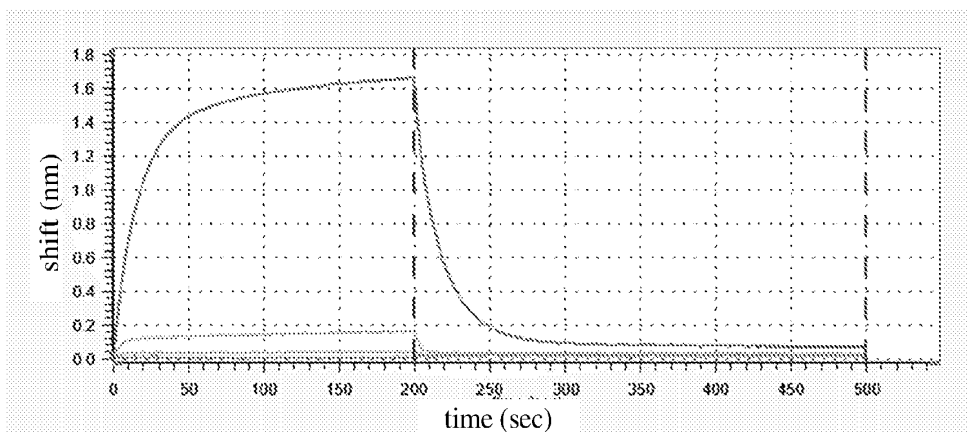
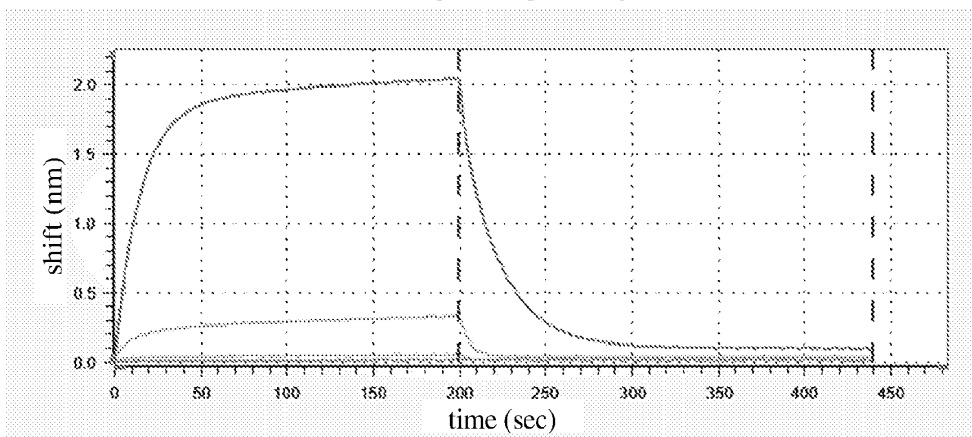


FIG. 44D

VEGFR2 hFc



VEGFR3 hFc



EGFR hFc

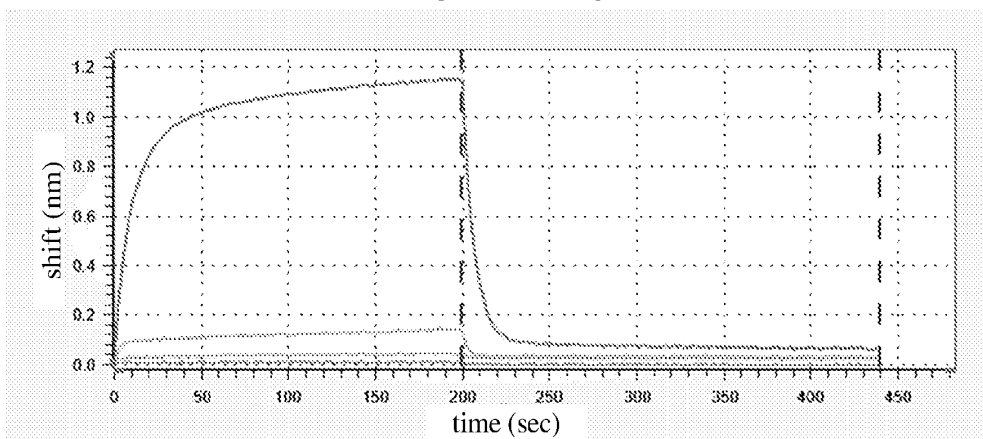
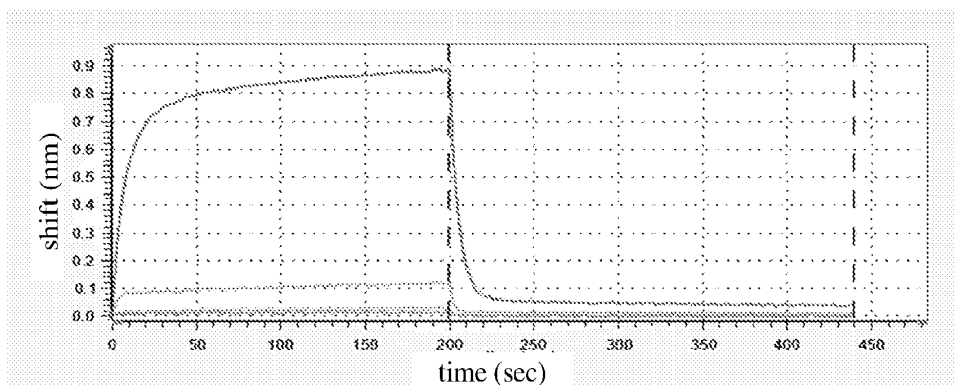
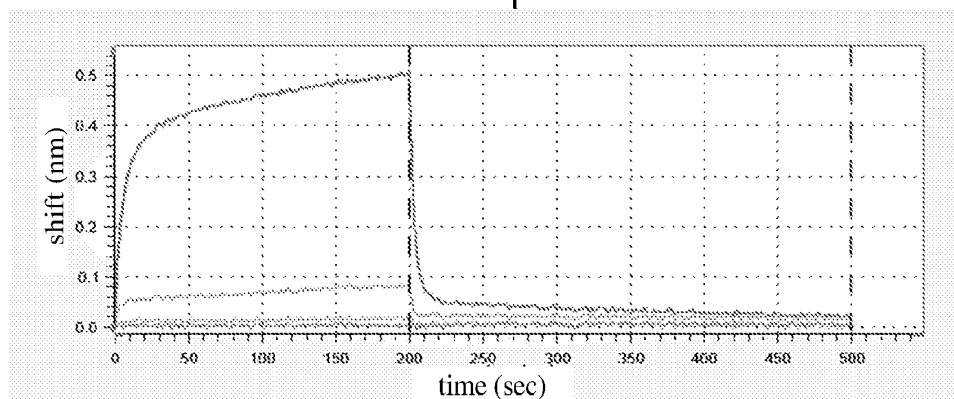


FIG. 44E

SUBSTITUTE SHEET (RULE 26)

PDGFR α hFcPDGFR β hFc

ErbB2 hFc

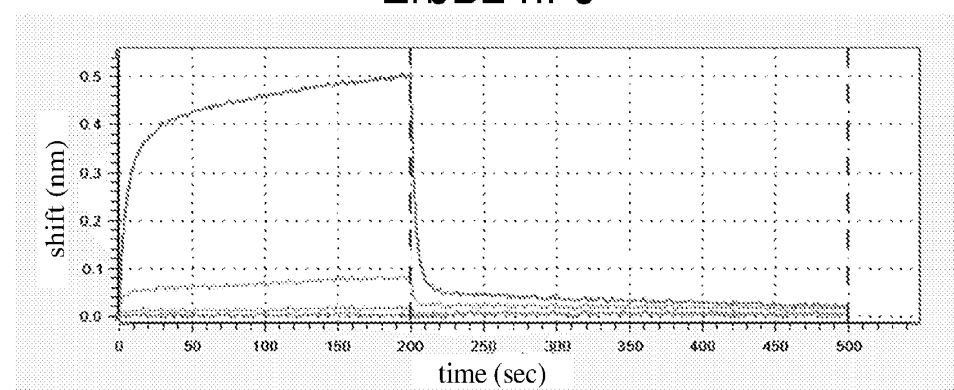


FIG. 44E cont.

Probes to capture ligand	Ligand	Analyte	k_{off} (1/s)	k_{on} (1/Ms)	K_D (M)	R^2
hFc	rhVEGFR2/hFc	rhGal3-His	0.0508	177	0.000287	0.999
hFc	rhVEGFR3/hFc	rhGal3-His	0.0452	1.34×10^4	3.37×10^{-6}	0.999
hFc	rhEGFR/hFc	rhGal3-His	0.0886	92.5	0.000958	0.996
hFc	rhPDGFR α /hFc	rhGal3-His	0.111	119	0.000936	0.996
hFc	rhPDGFR β /hFc	rhGal3-His	0.0794	95.4	0.000832	0.997
hFc	rhErbB2/hFc	rhGal3-His	0.125	41.3	0.00303	0.99

FIG. 44E cont.

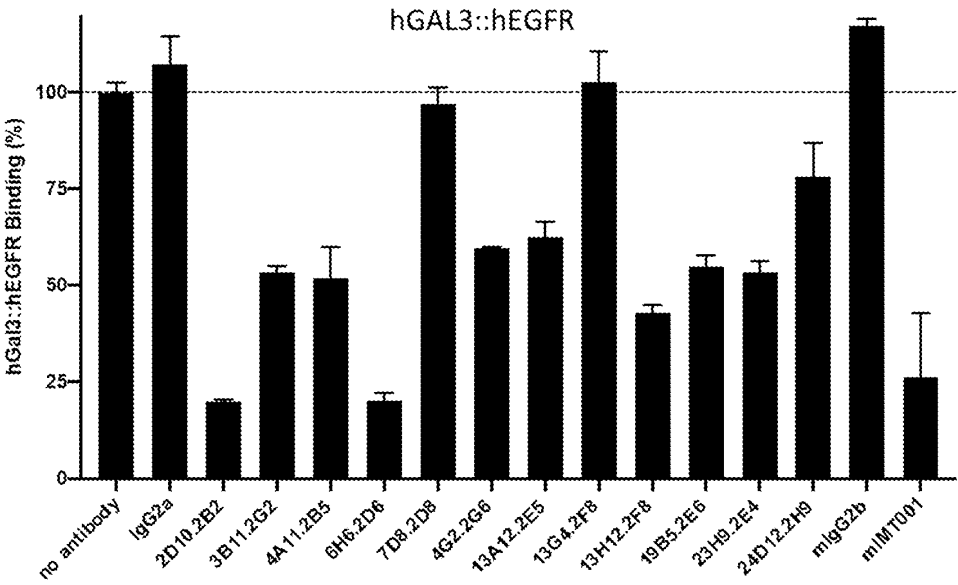


FIG. 45A

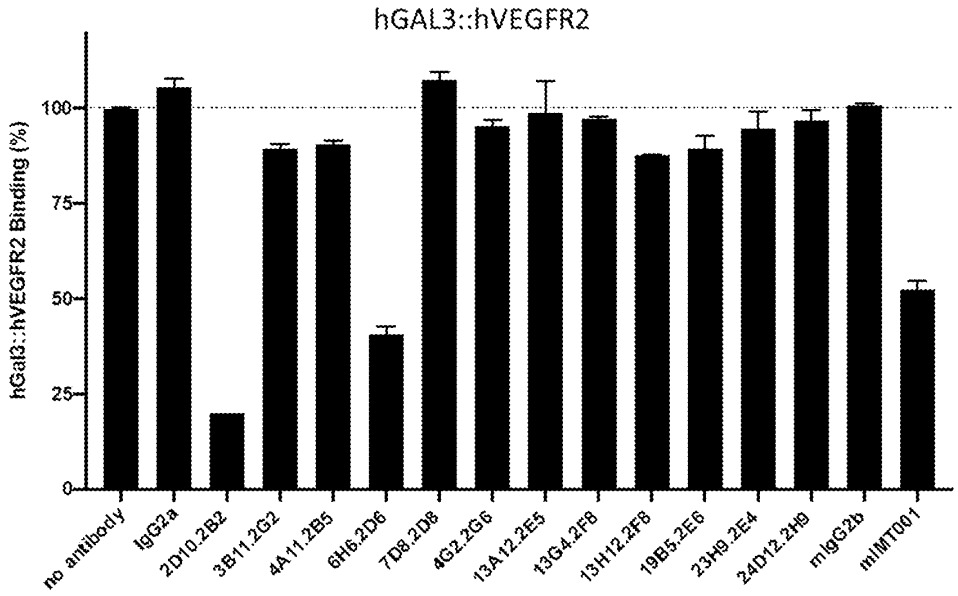


FIG. 45B

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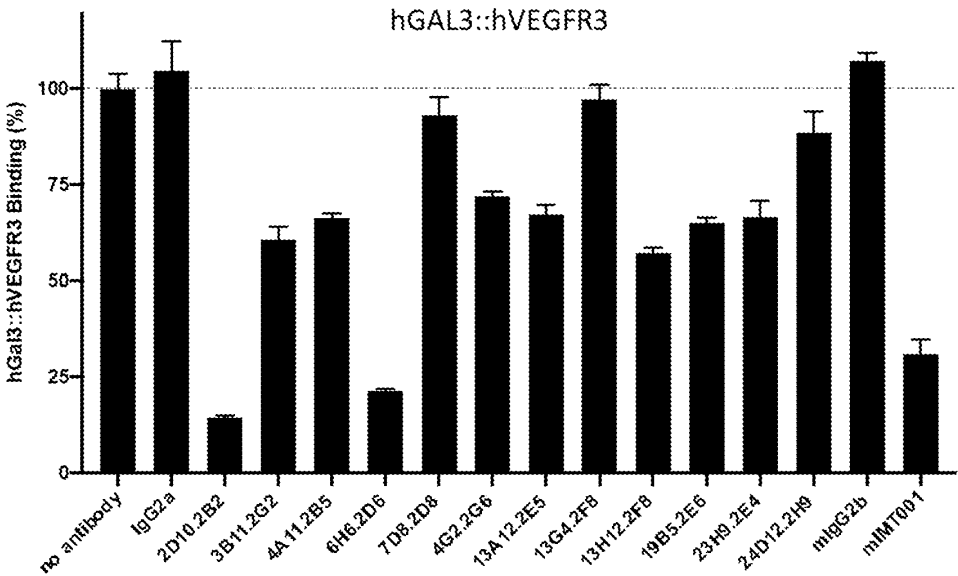


FIG. 45C

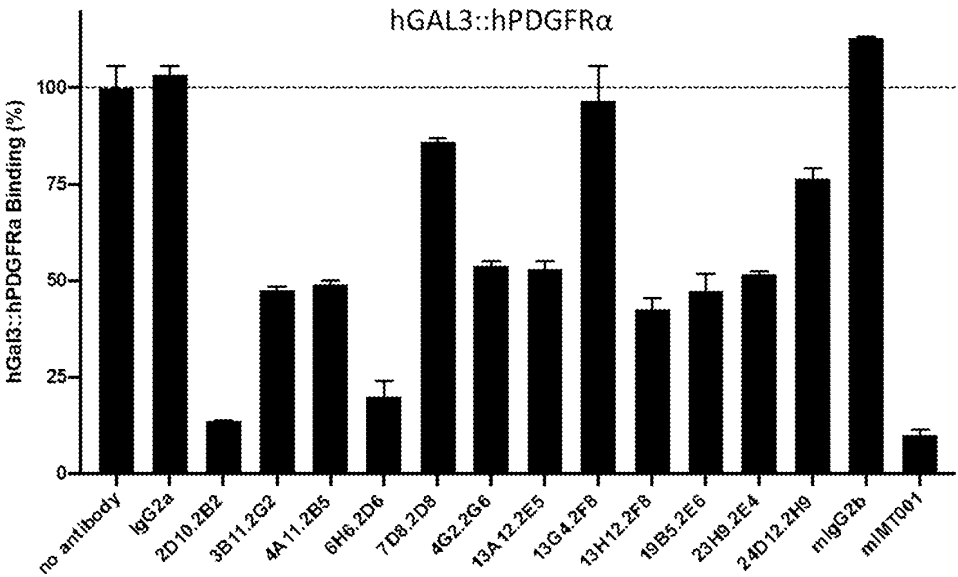


FIG. 45D

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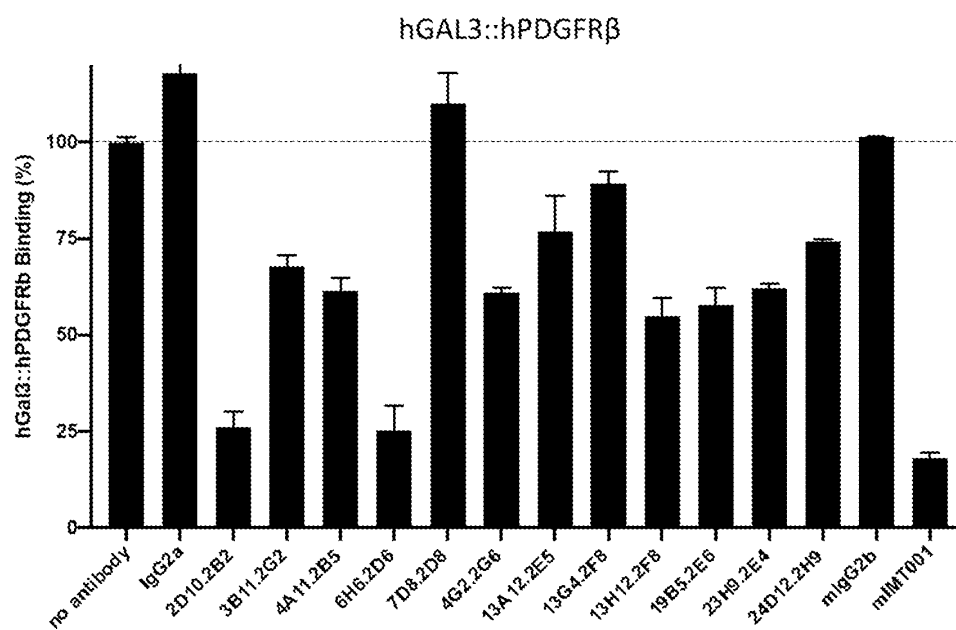


FIG. 45E

Association and dissociation (6H6)

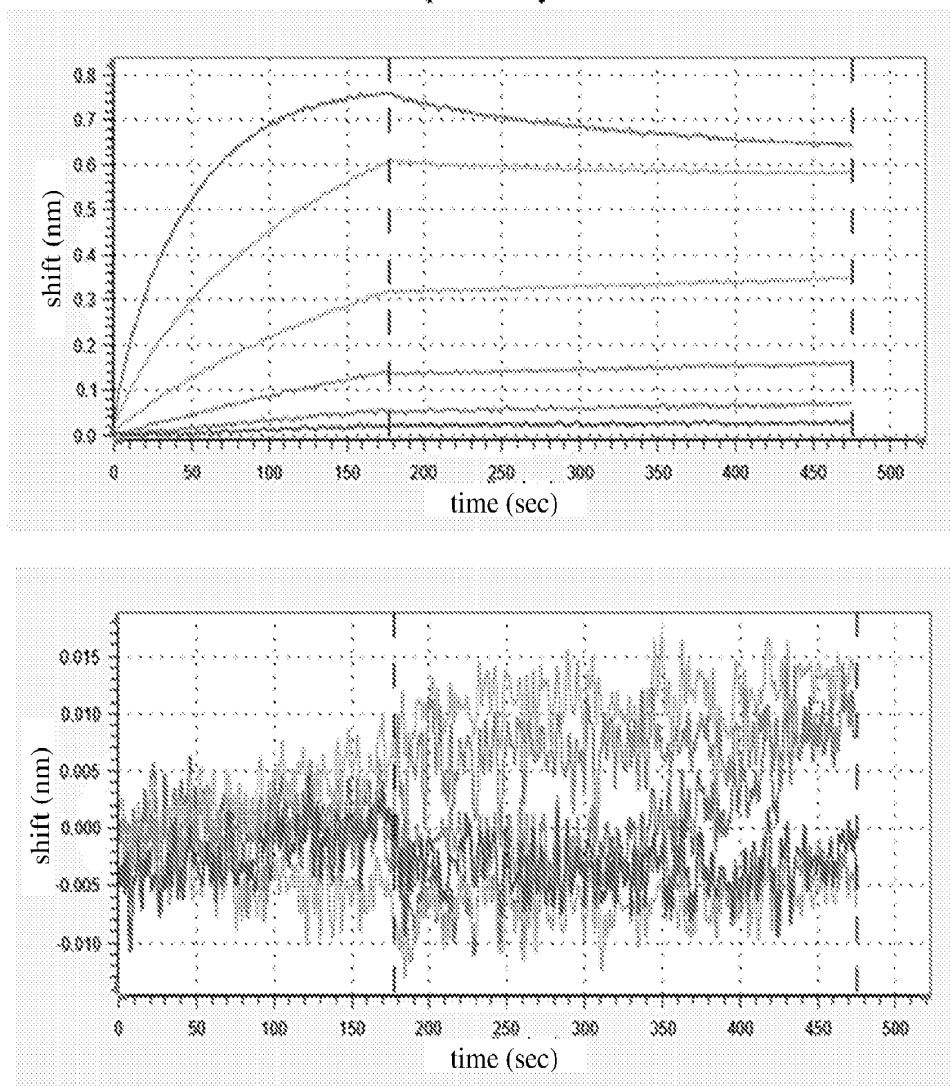
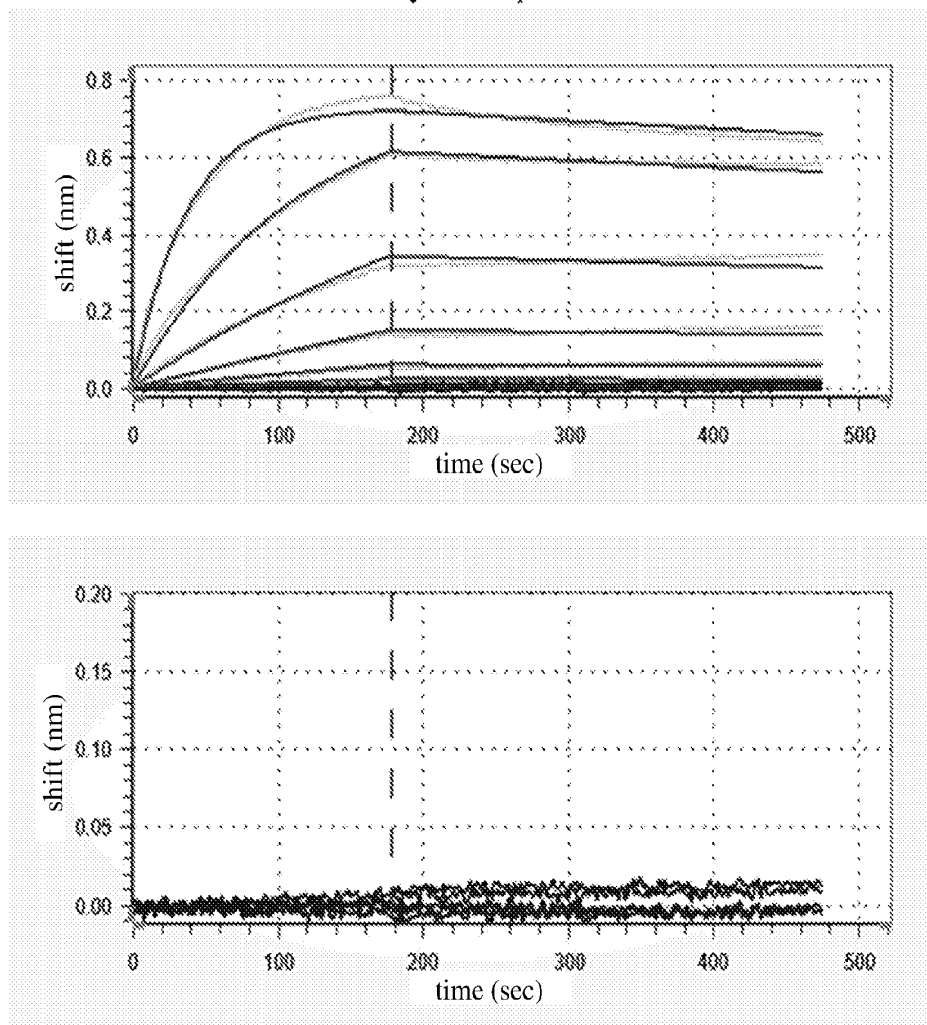


FIG. 46A

Association and dissociation fitted (6H6)



Ligand	Analyte	k_{off} (1/s)	k_{on} (1/Ms)	K_D (M)	R^2
6H6 mlgG2a	rhGalectin-3	0.000299	8.80×10^4	3.39×10^{-9}	0.997
6H6 mlgG2a	rhGalectin-3-CRD	No binding/weak binding			

FIG. 46A cont.

Association and dissociation (2D10)

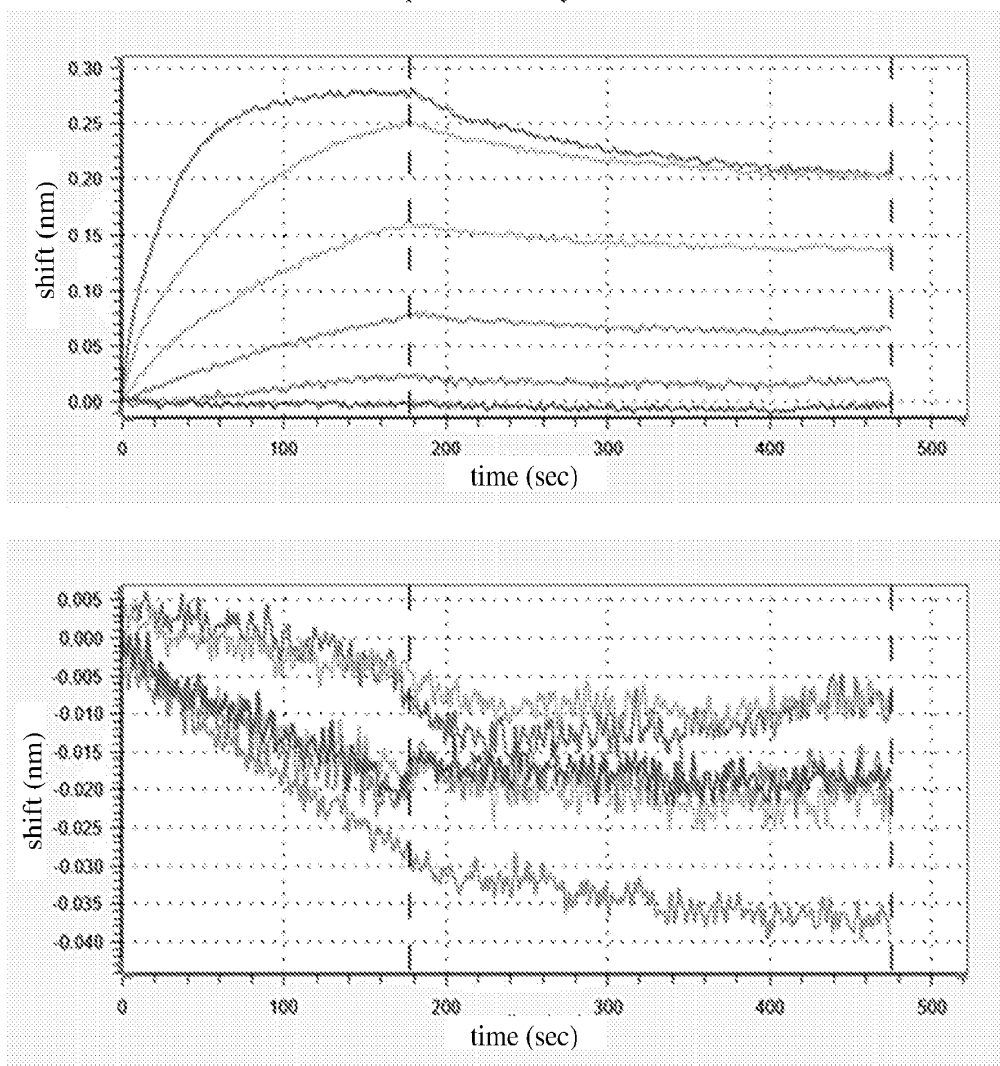
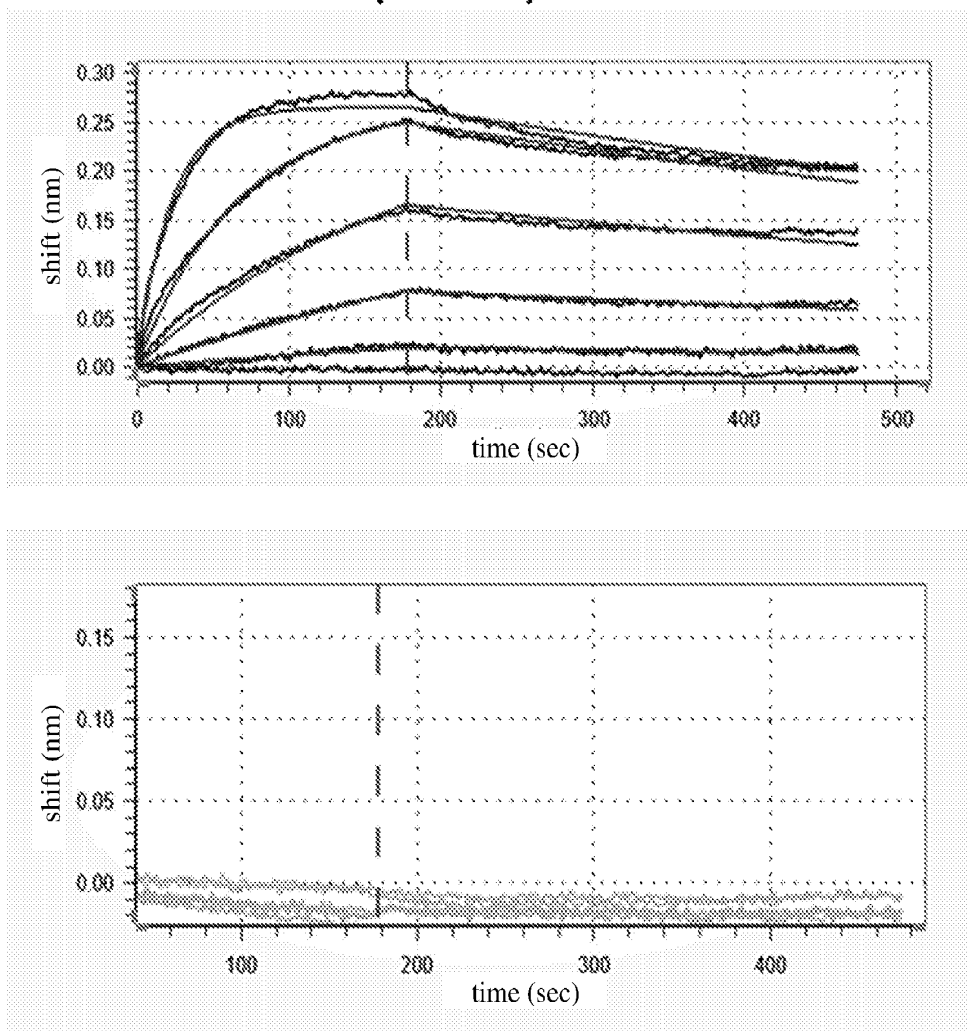


FIG. 46B

Association and dissociation fitted (2D10)



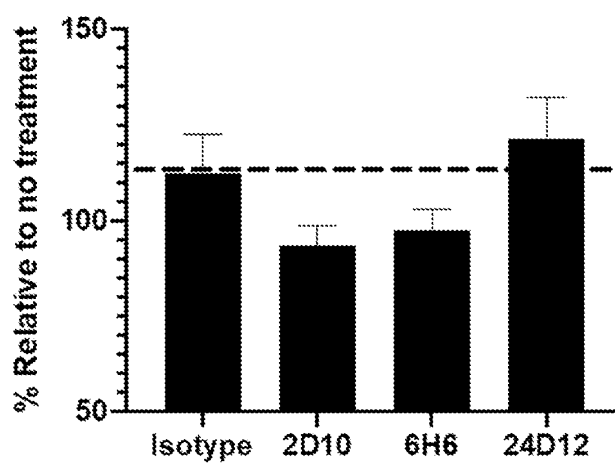
Ligand	Analyte	k_{off} (1/s)	k_{on} (1/Ms)	K_D (M)	R^2
2D10 hlgG4	rhGalectin-3	0.000942	1.42×10^5	6.63×10^{-9}	0.995
2D10 hlgG4	rhGalectin-3-CRD	No binding / low binding			

FIG. 46B cont.

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(High EGFR)

Hep3B, 22nM



(low EGFR)

HepG2, 22nM

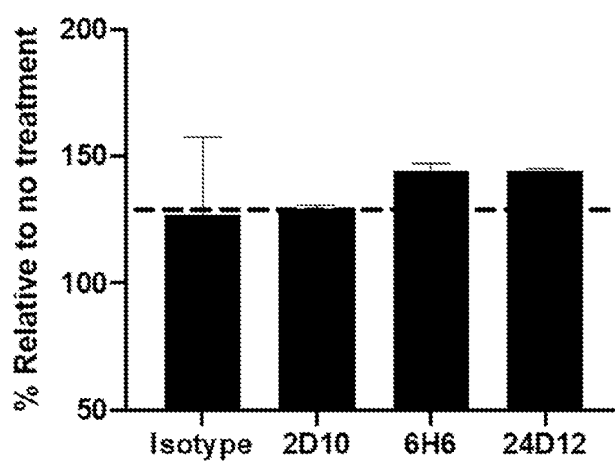


FIG. 47A

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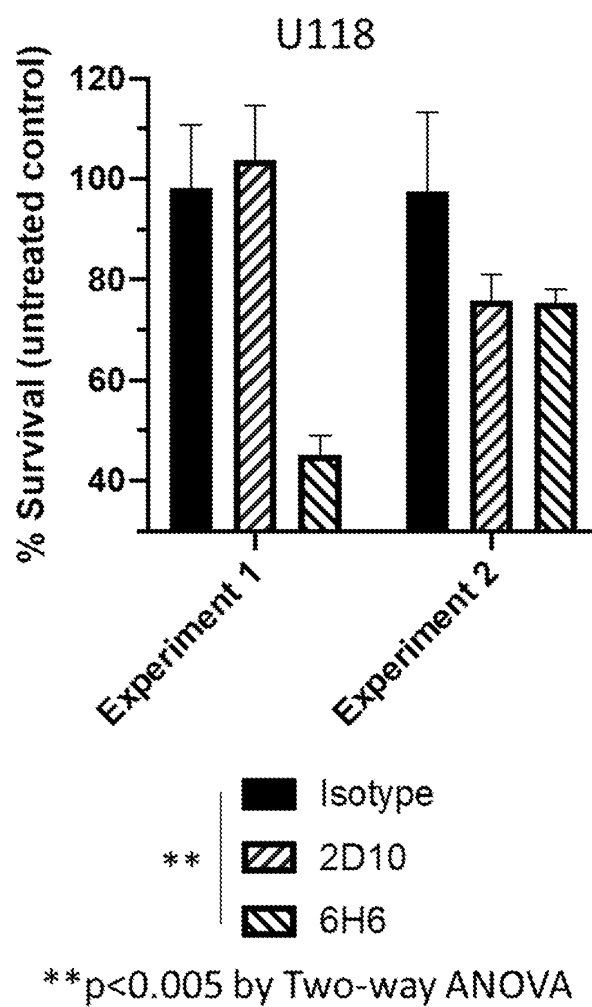
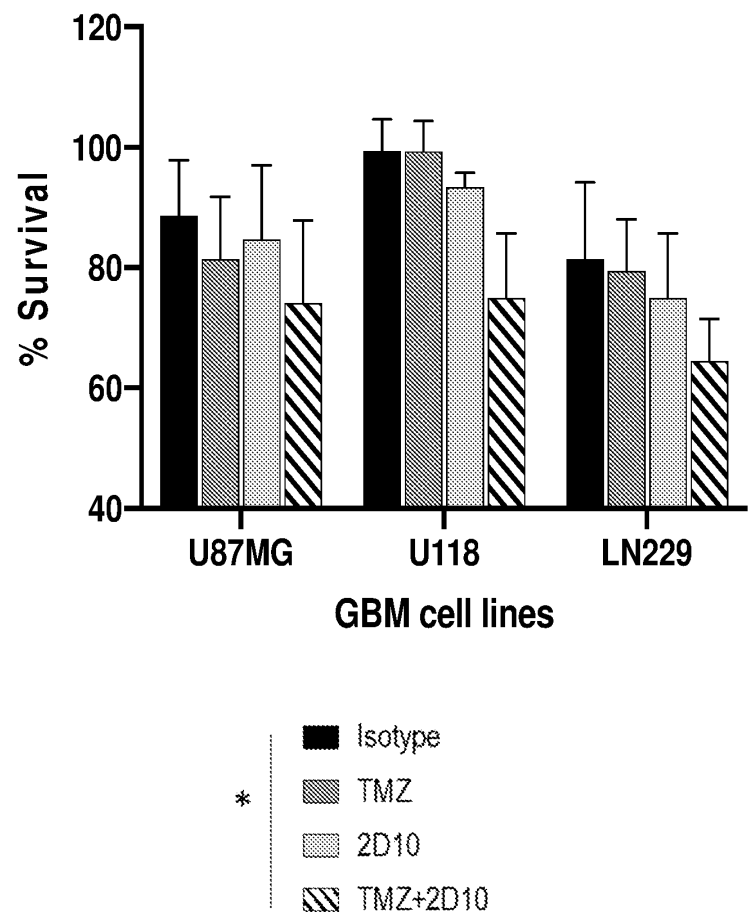


FIG. 47B

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*p<0.05 by Two-way ANOVA

FIG. 48

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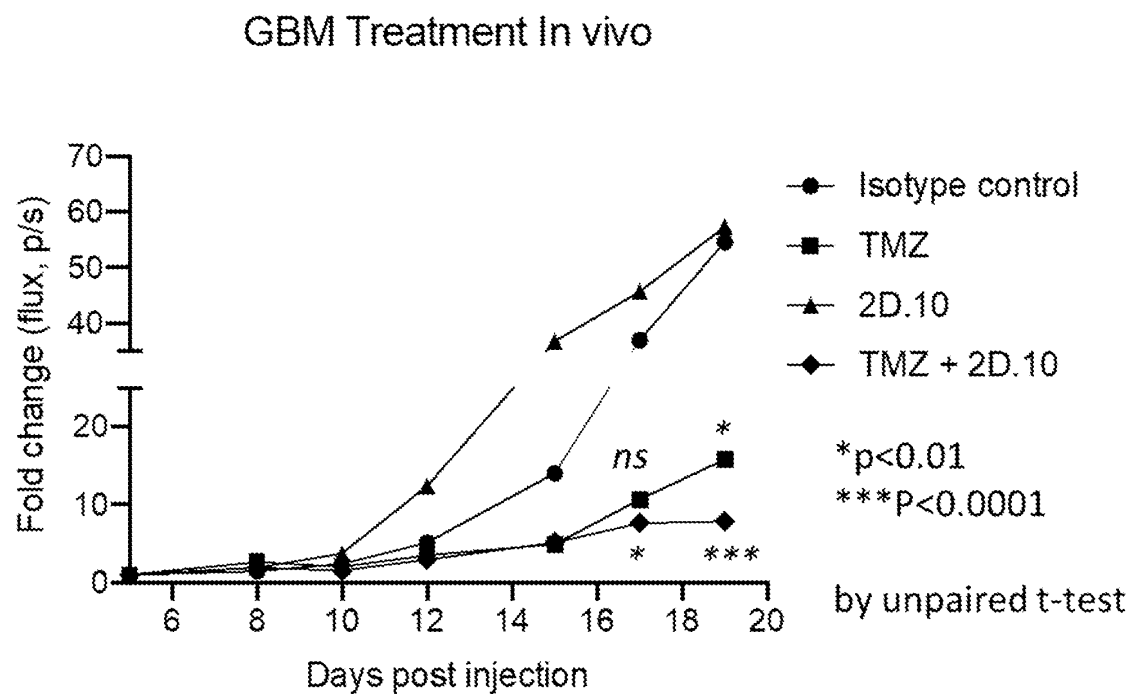
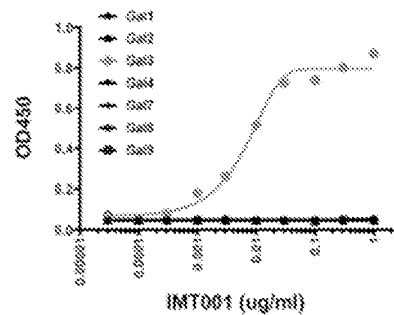


FIG. 49

	Antibody KD Affinities (nM)			
	Human	Cynomolgus	Rat*	Mouse
IMT001	3.6	8.9	NA	2.3
IMT006	8.9	5.1	NA	40000

IMT001 is highly specific for galectin-3



IMT006 is highly specific for galectin-3

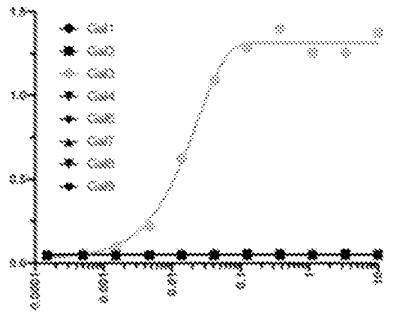
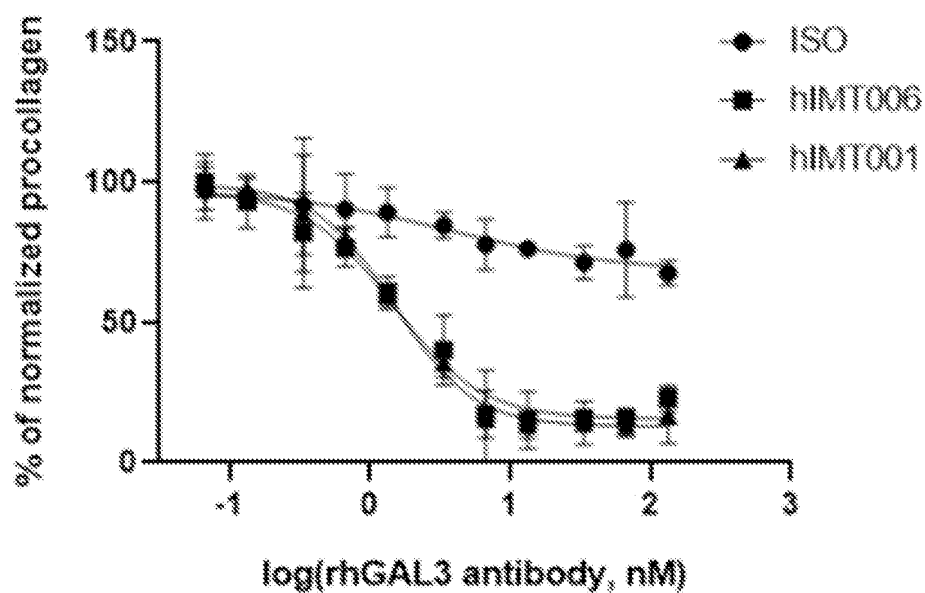


FIG. 50

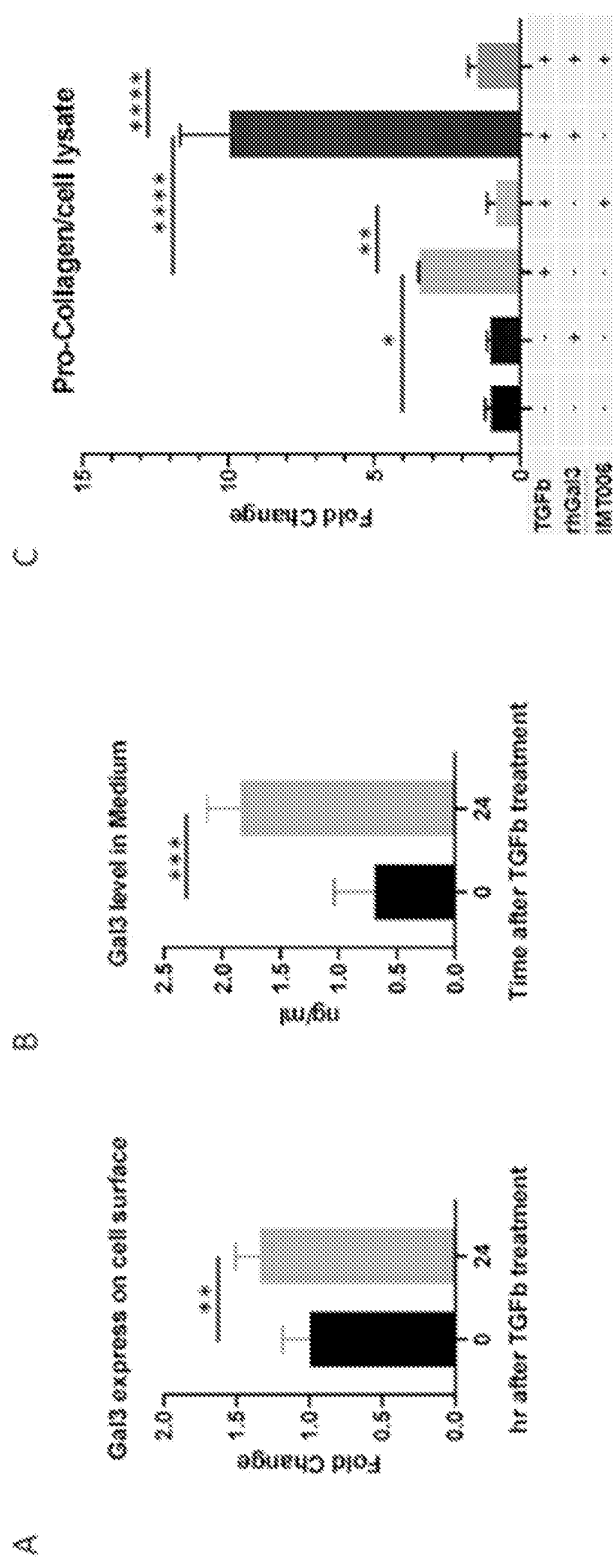
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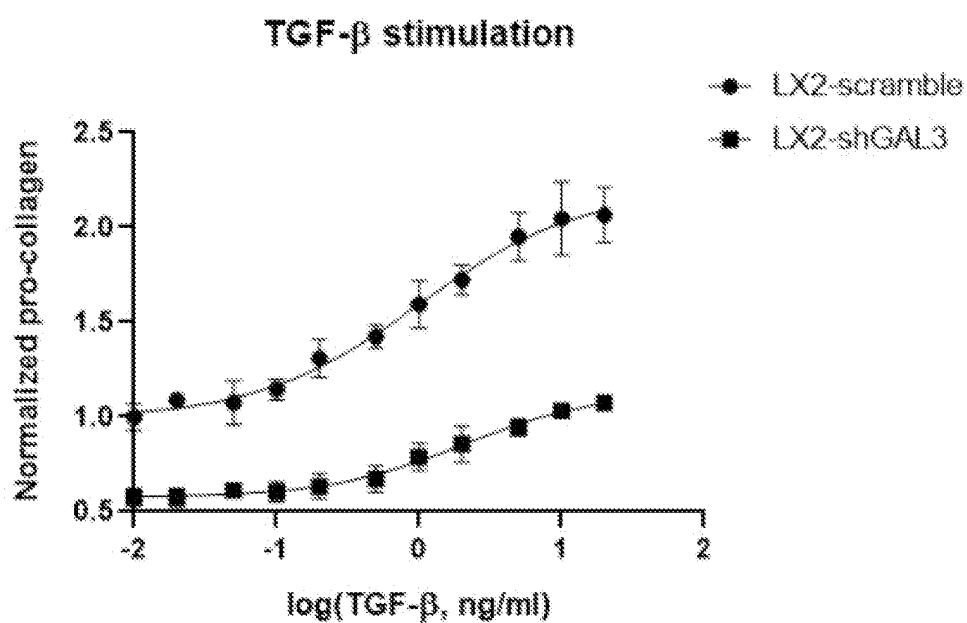
Calculated IMT006 IC₅₀: 0.25 µg/mL

Calculated IMT001 IC₅₀: 0.23 µg/mL

FIG. 51



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Calculated TGF- β EC₅₀ in LX2-ctrl: 1.01ng/ml
Calculated TGF- β EC₅₀ in LX2-304: 2.04ng/ml

FIG. 54

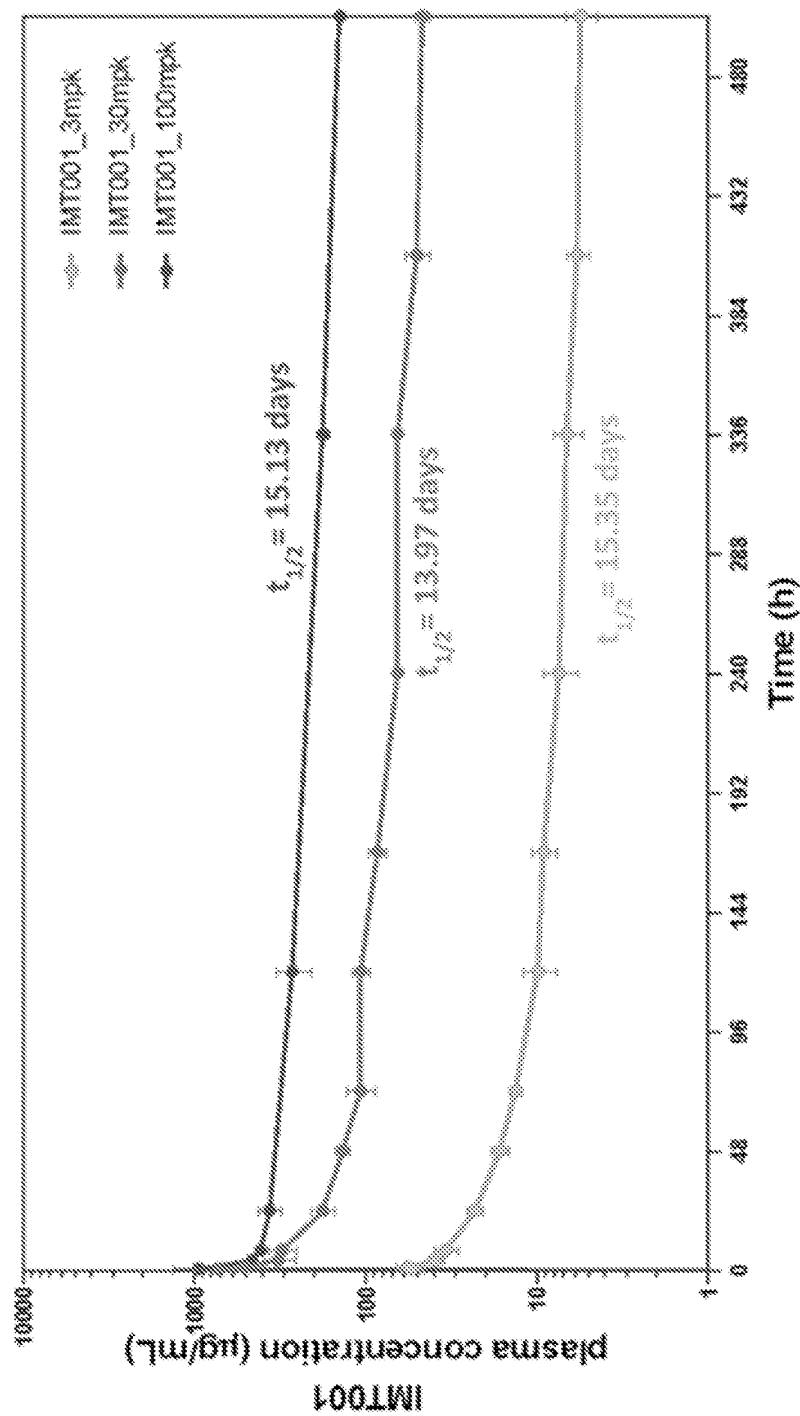


FIG. 55

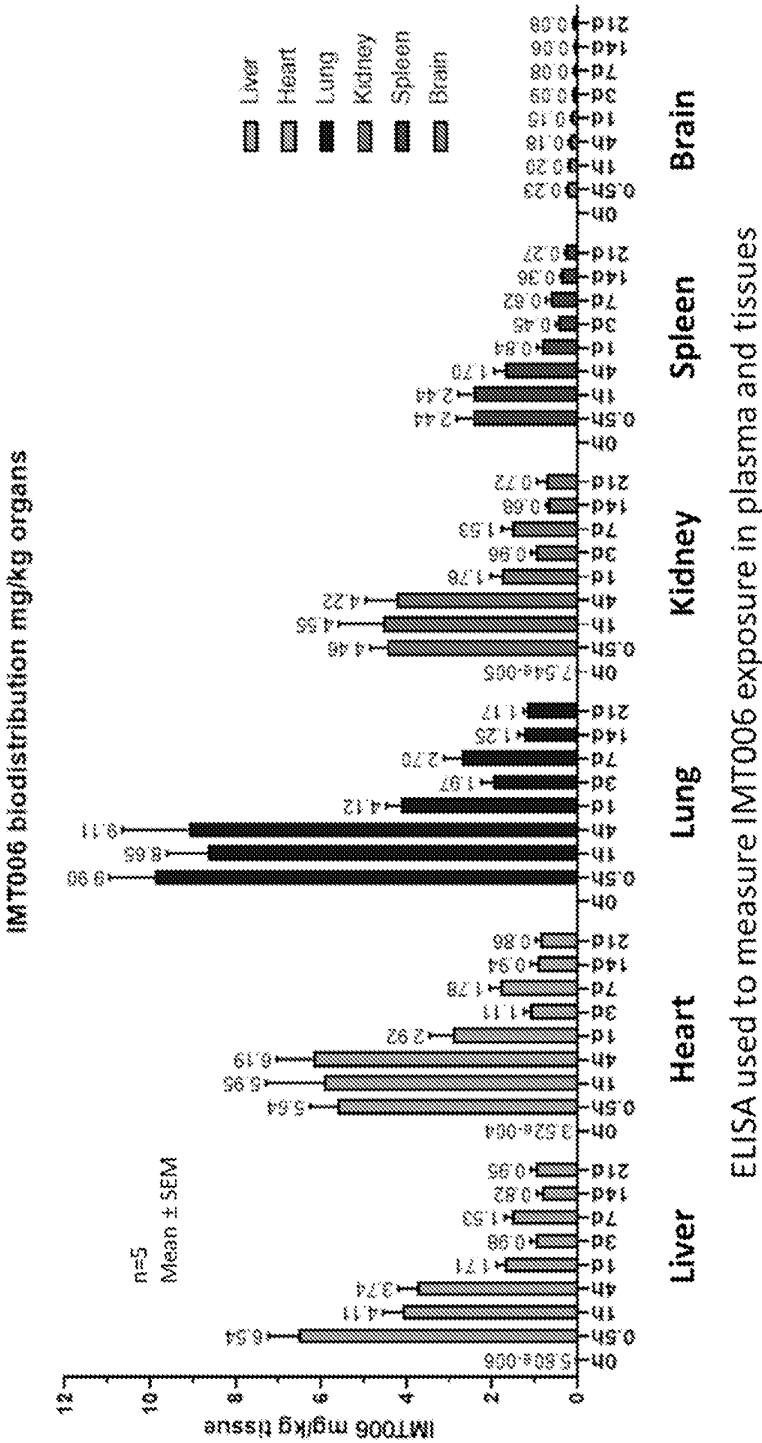


FIG. 56

Total and unbound Gal3 in rat plasma after IMT001 single dose

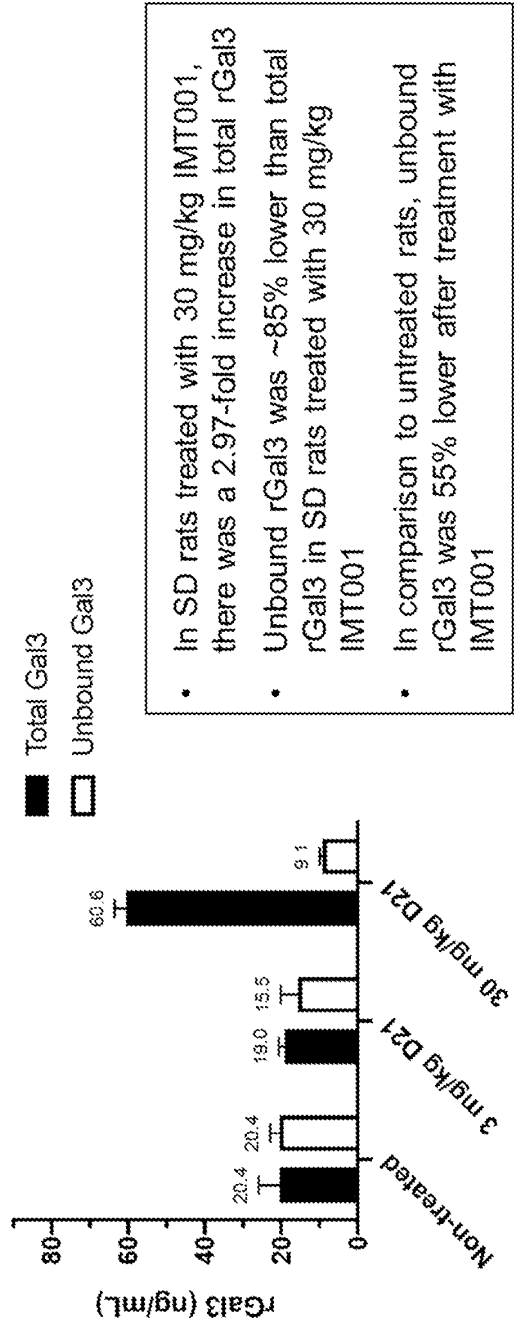


FIG. 57

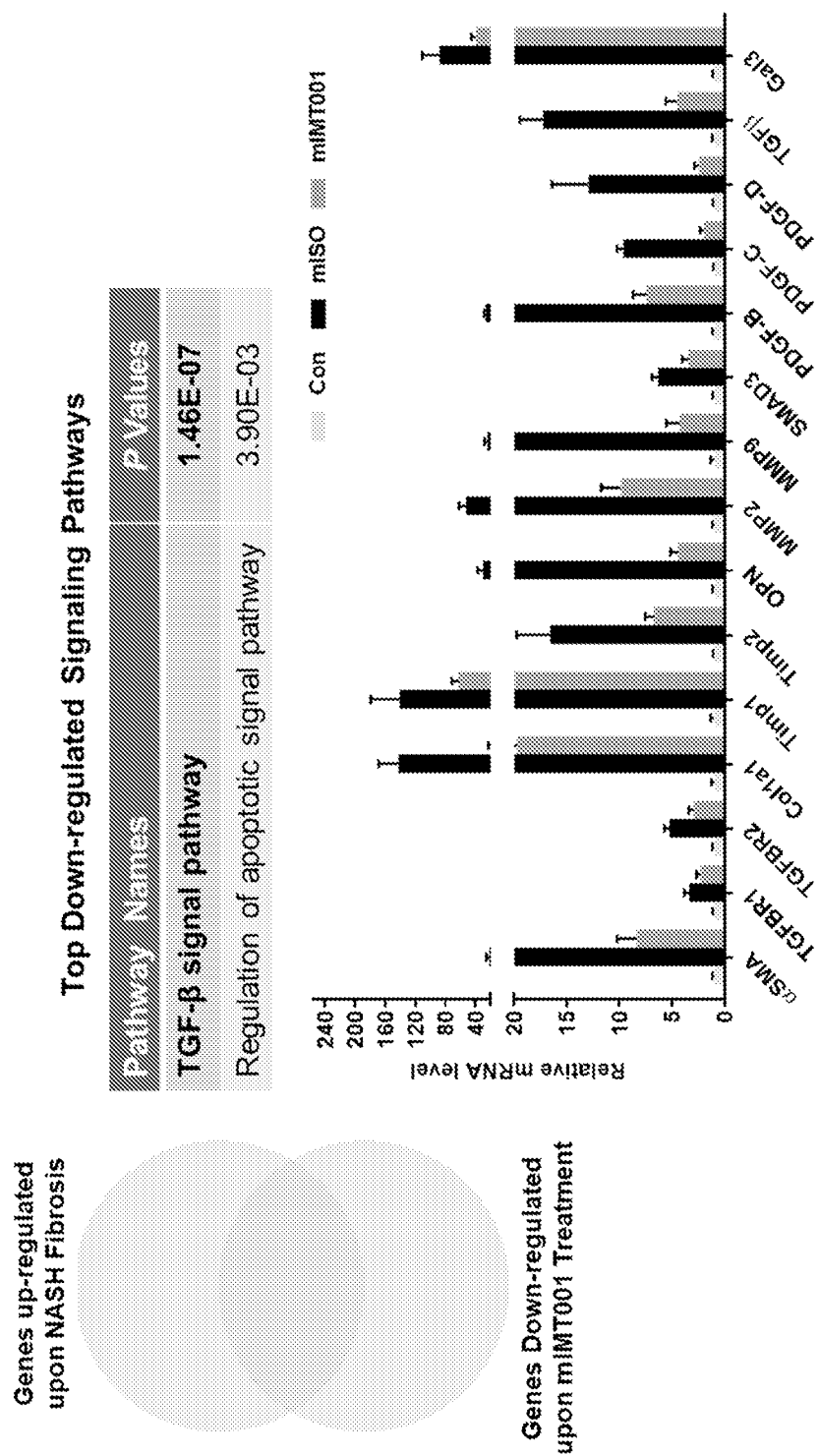


FIG. 58

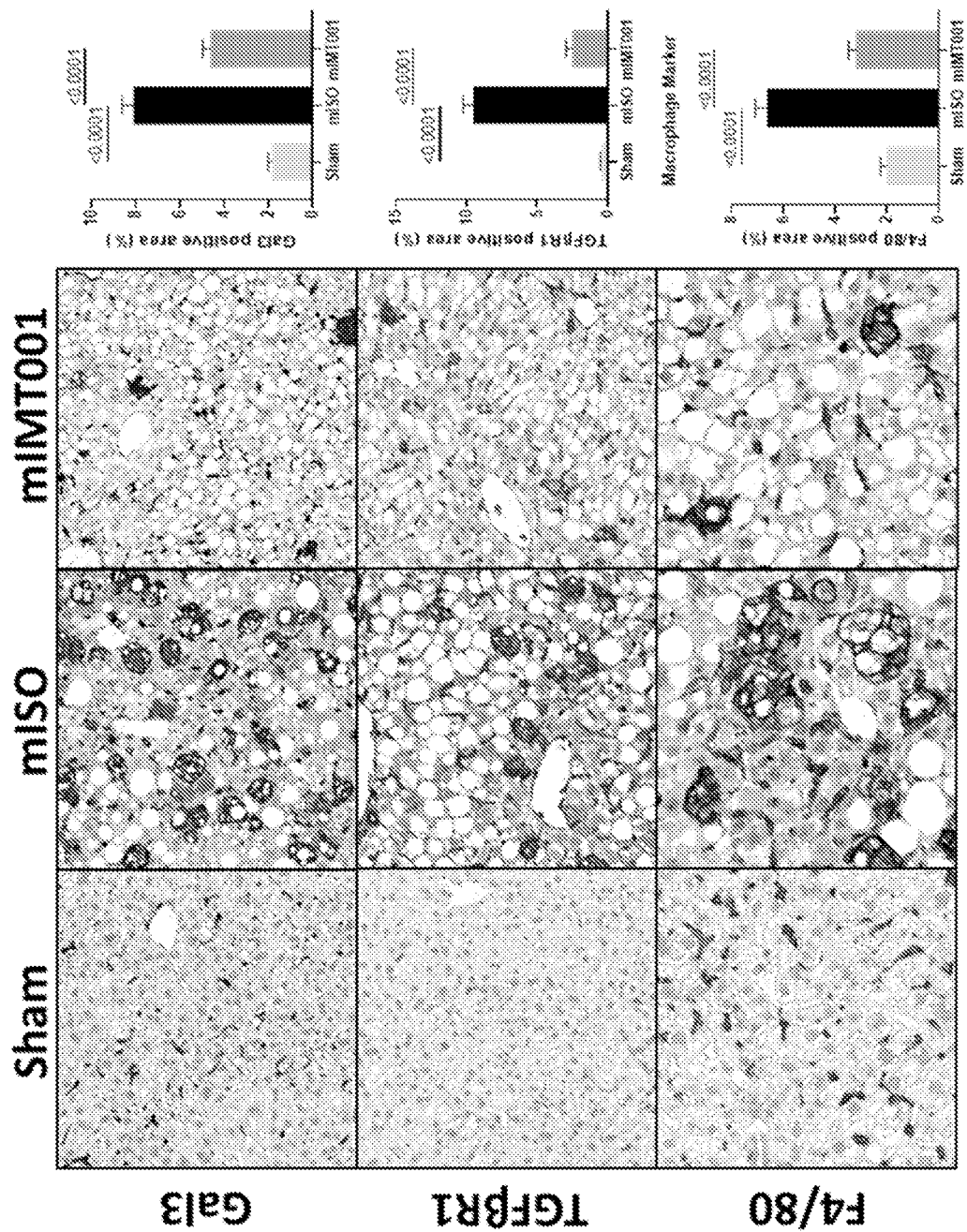


FIG. 59

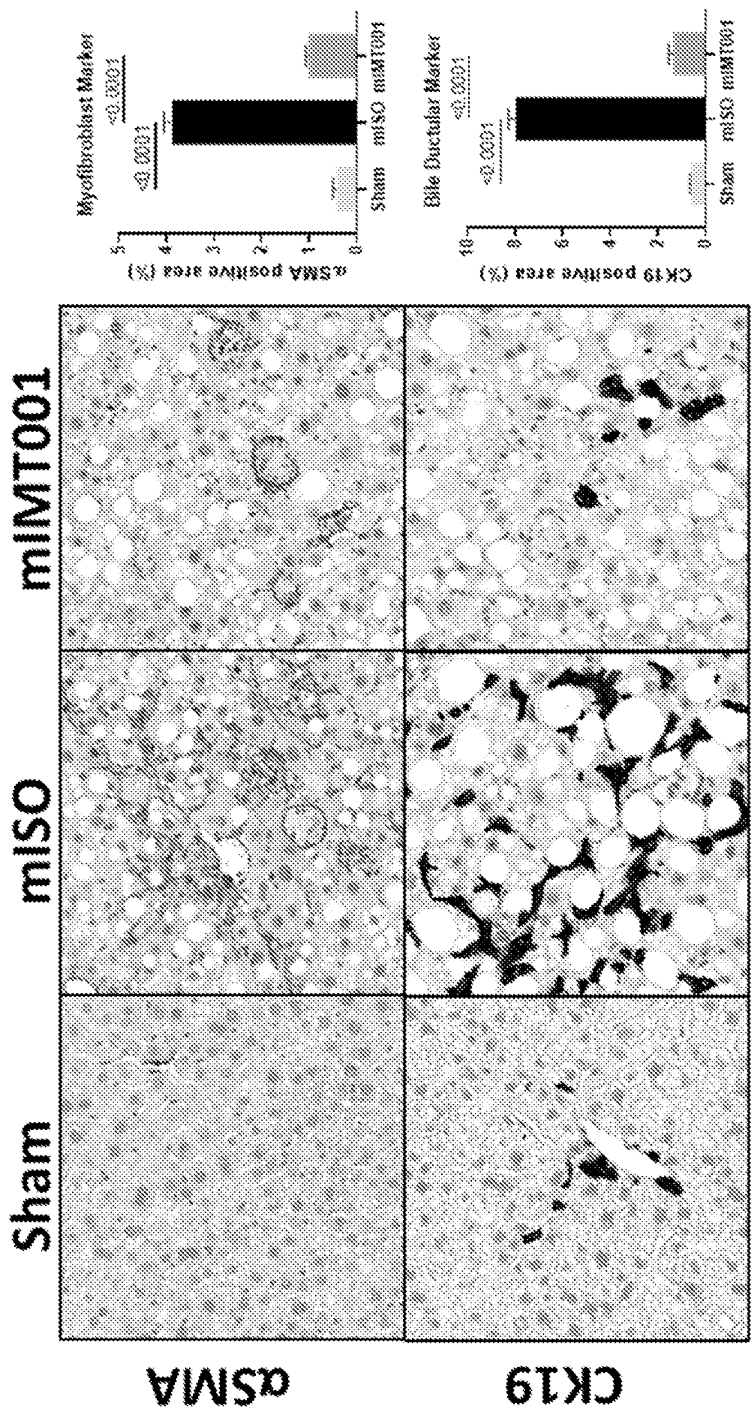


FIG. 59 cont.

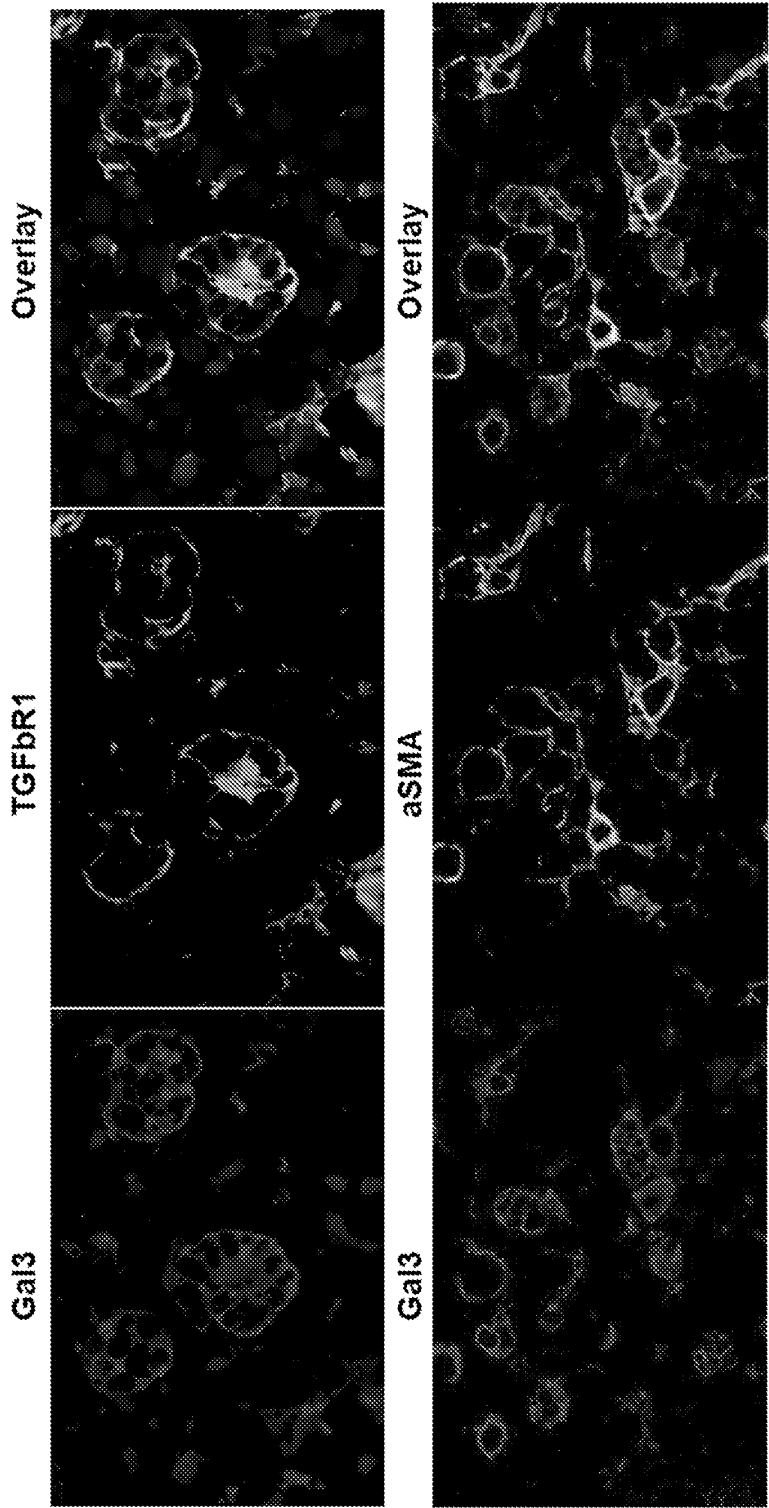


FIG. 60

Co-IP analysis of Gal3 and TGFβR1/2 in 293T cells

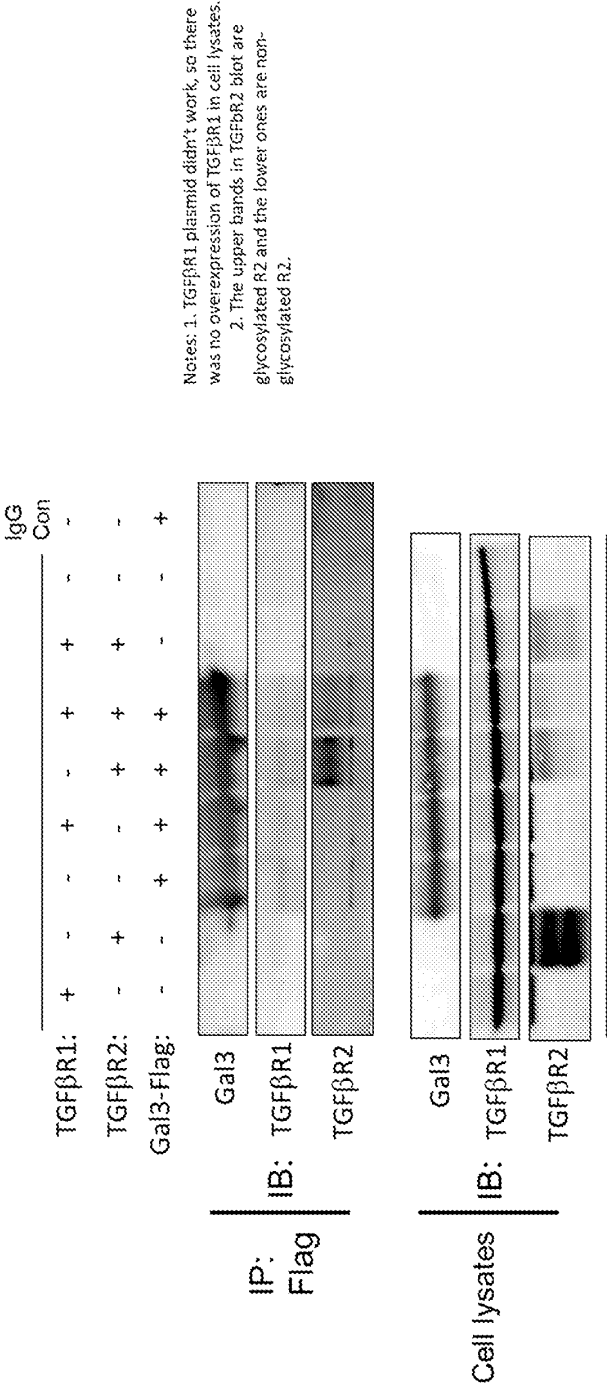
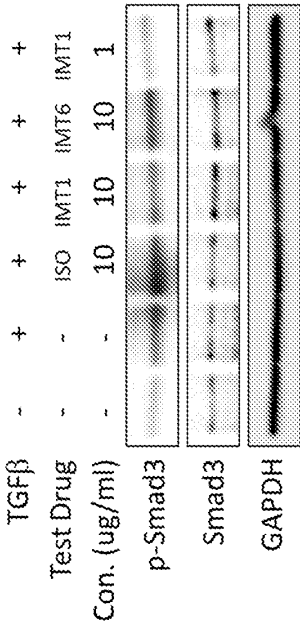


FIG. 61

Analysis of Smad3 expression and phosphorylation status by Western immunoblotting in LX2 cells following exposure to TGFb



Experiment: LX2 cells were starved for 24 hours. The cells were exposed to 2ng/ml of TGFb alone or in conjunction with control antibody, IMT001 or IMT006 in indicated concentrations. Cell lysates were analyzed for the levels of SMAD3 and phosphorylated SMAD3 proteins. GAPDH levels were used as a loading control.

FIG. 62

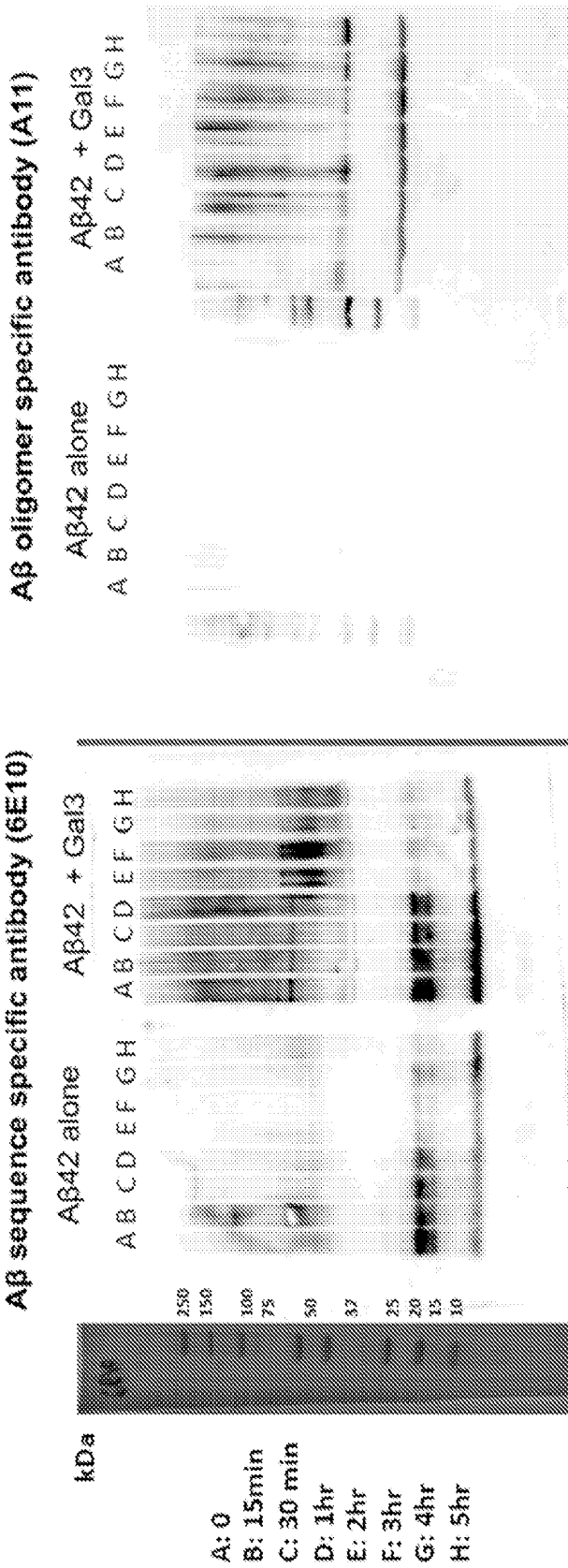
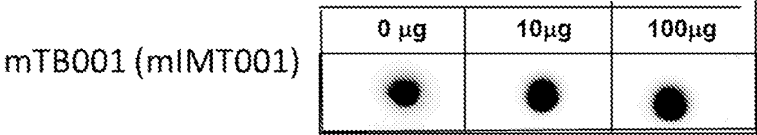


FIG. 63A

Aβ sequence specific antibody (6E10)



Aβ oligomer specific antibody (A11)

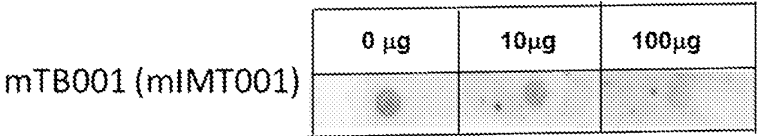


FIG. 63B

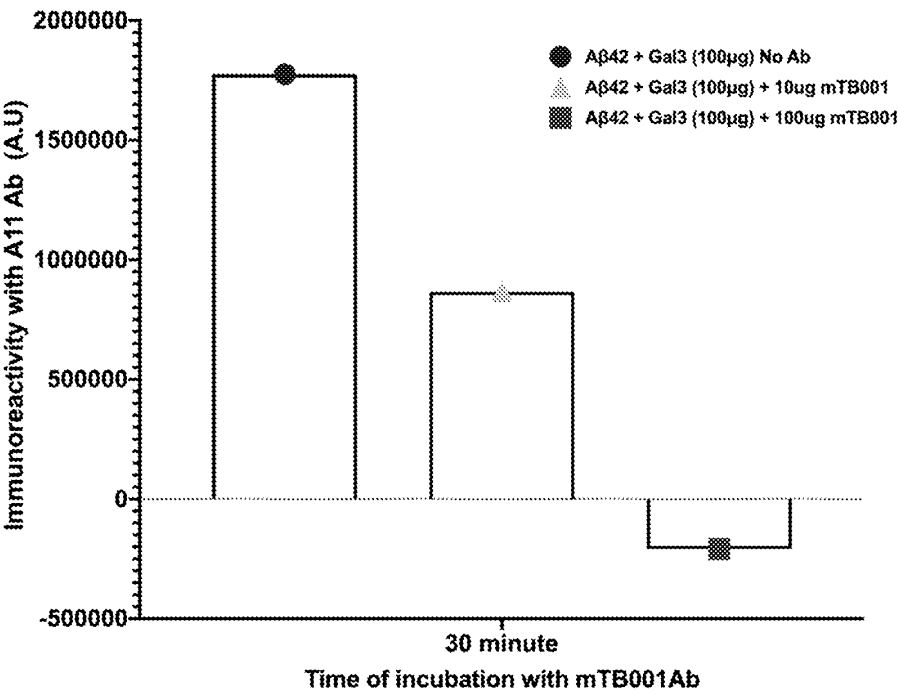


FIG. 63C

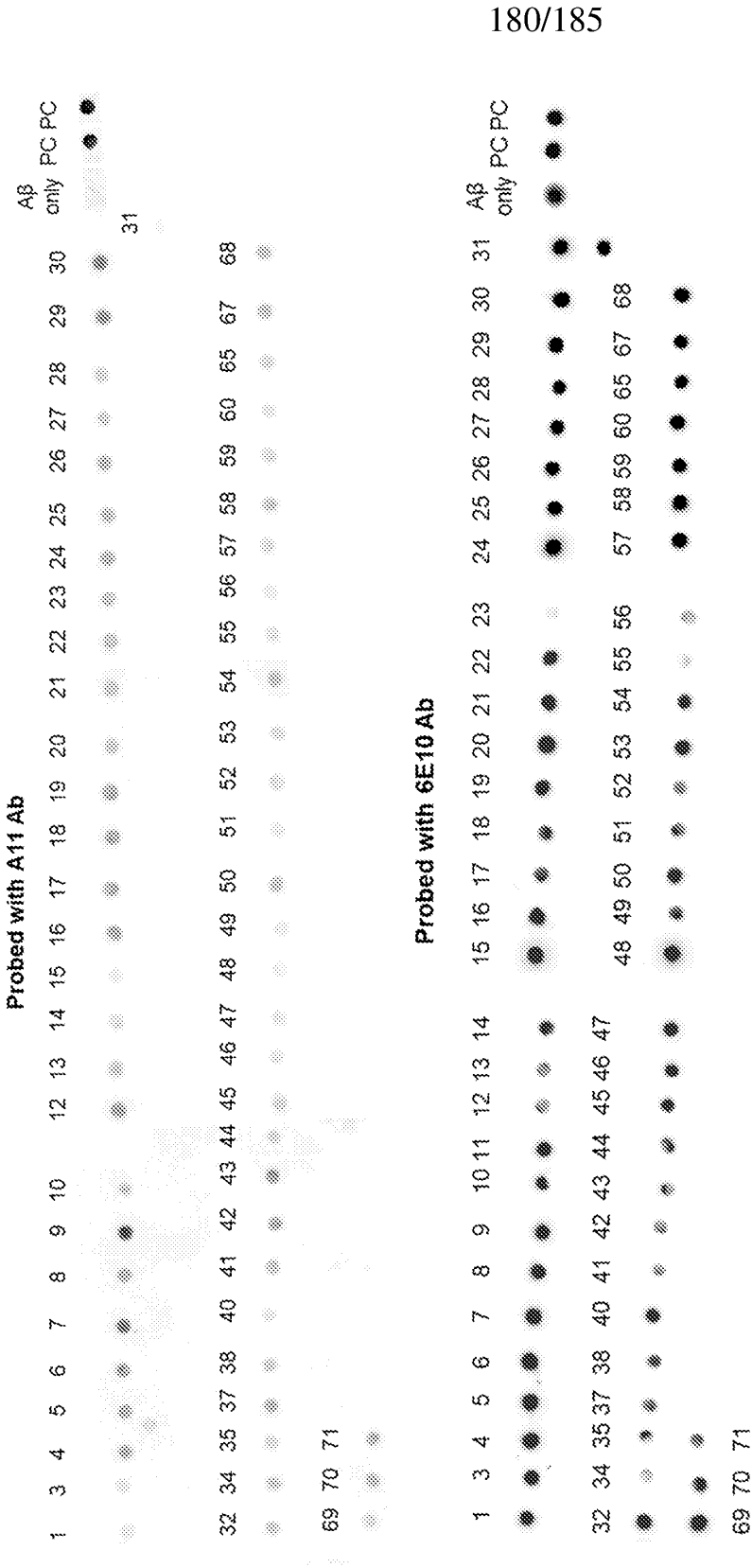


FIG. 63D

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#	Antibody Name	#	Antibody name
1	849.8D10	35	847.11B1
3	F846C.1B2	37	847.15F9
4	846.2D4	38	847.26F5
5	846.1H12	40	847.21B11
6	846T.4C9	41	847.4B10
7	846T.2E3	42	847.14H4
8	846.2H3	43	849.4F12
9	846.2B11	44	14D11
10	849.4B2	45	24D12.2H9
12	846T.10B1	46	13A12.2E5
13	846.1F5	47	15F10.2D6
14	846T.4E11	48	14H10.2C9
15	849.1D2	49	23H9.2E4
16	846T.2E3	50	15G7.2A7
17	846.2F11	51	7D8.2D8
18	849.8D12	52	3B11.2G2
19	849.5C2	53	12G5.D7
20	849.2F12	54	9H2.2H10
21	846T.14A2	55	13G4.2F8
22	846T.4F5	56	20D11.2C6
23	846T.7F10	57	6B3.2D3
24	846T.8D1	58	847.3B3
25	846T.16B5	59	847.10C9
26	846T.14E4	60	847.11D6
27	849.2D7	65	847.28D1
28	849.4F2	67	847.15D12
30	846.4D5	68	847.15H11
31	846.1H5	69	847.20H7
32	847.2B8	70	847.27B9
34	847.10B9	71	F847C.21H6

FIG. 63D cont.

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Murine IMT001	TB001	4A11.H1L1	TB006	4A11.H4L2
mIMT001	IMT001	IMT006-1	4A11.H3L1	IMT006-8
	IMT001-4	IMT006b	IMT006-5	IMT006c
			IMT006a	

Antibody names shown in each column refer to the same antibody as provided in the present disclosure and may be used interchangeably

FIG. 64

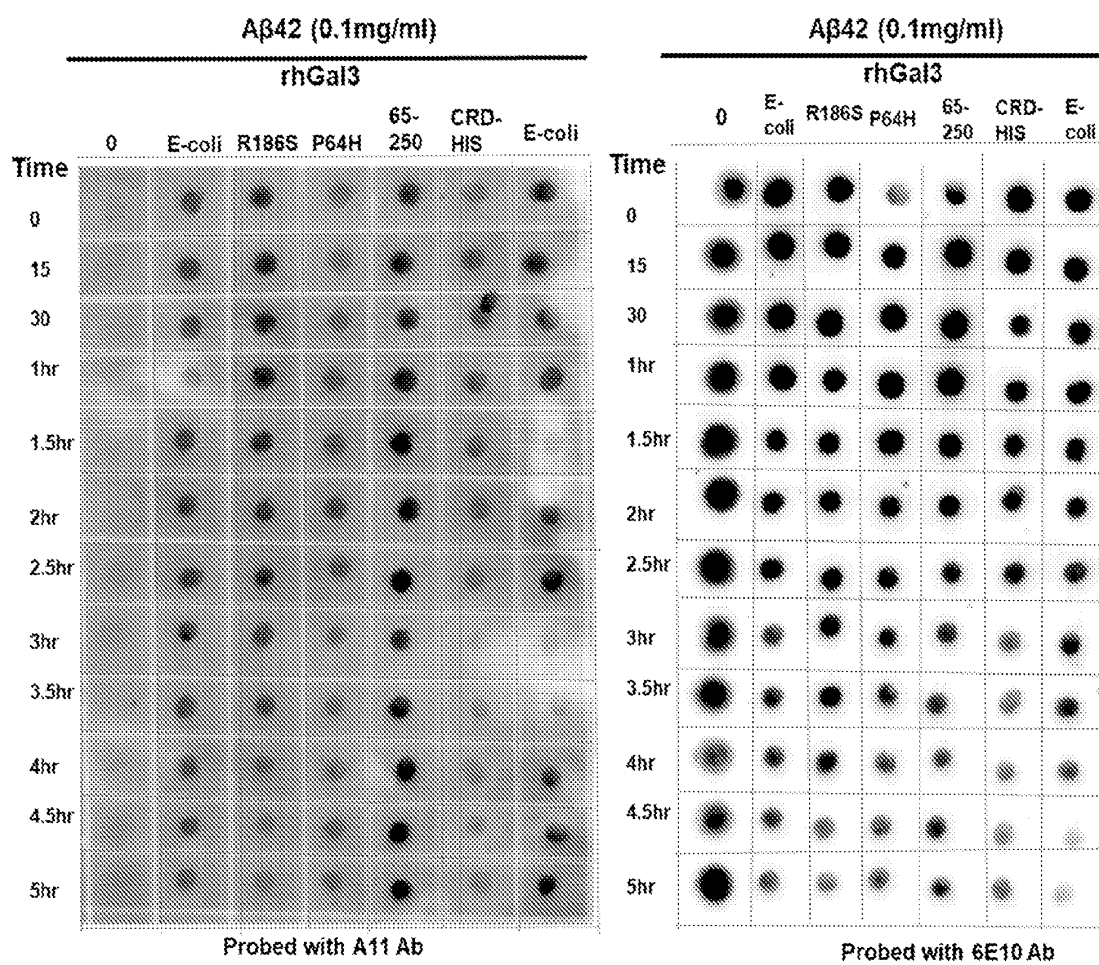


FIG. 65A

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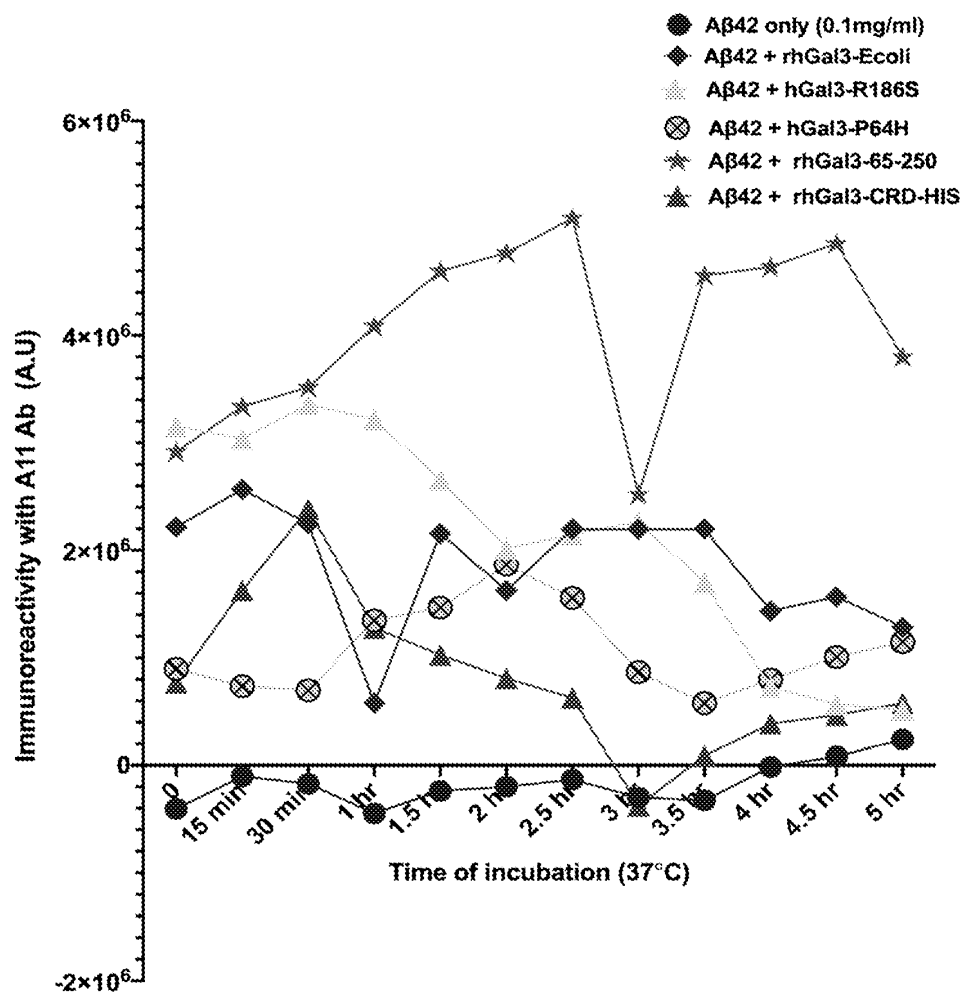


FIG. 65B

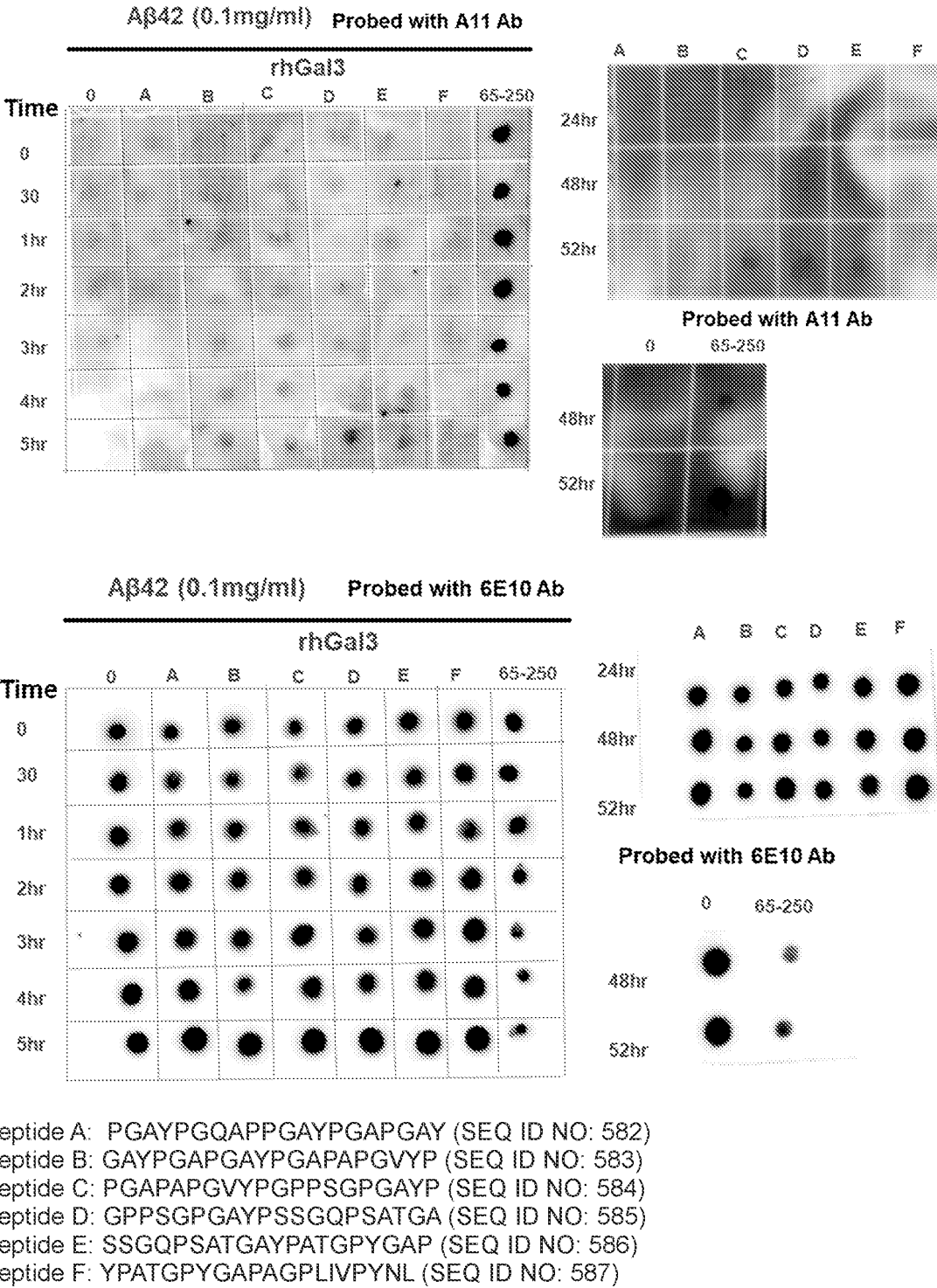


FIG. 65C