

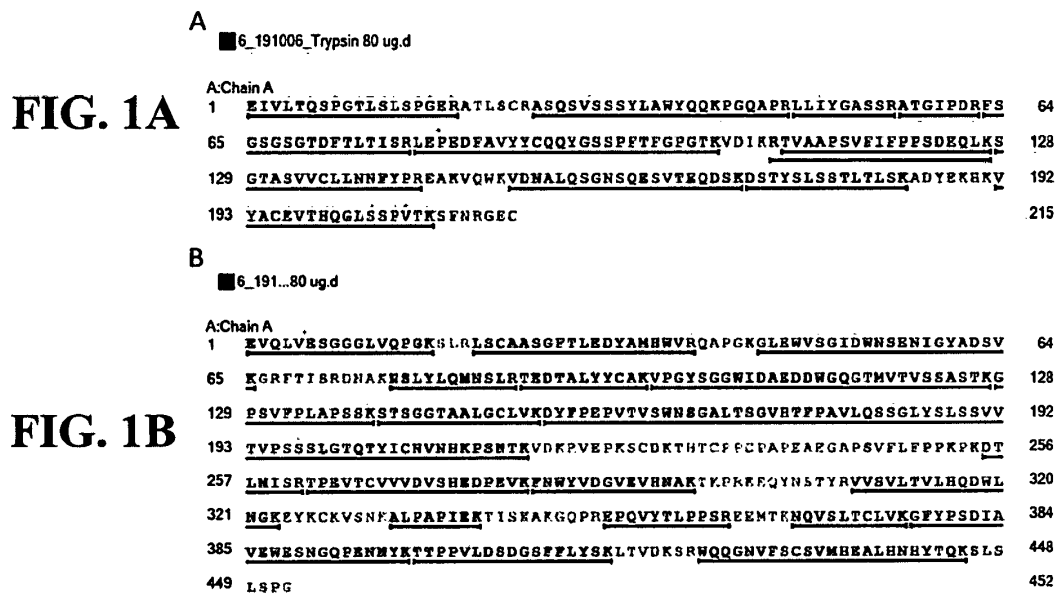


Figure 1A-B: Sequence for 767-IgG1.3 with identified tryptic peptides underlined (A) Light chain (85.6% coverage) (B) Heavy chain (76.1% coverage).

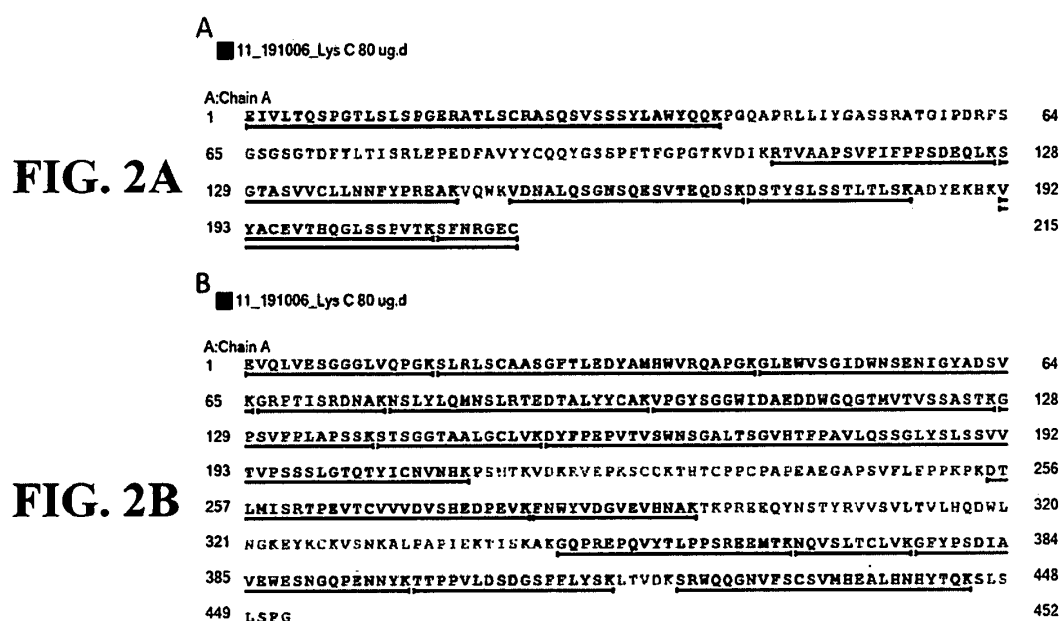


Figure 2A-B: Sequence for 767-IgG1.3 with identified Lys-C peptides underlined (A) Light chain (63.3% coverage) (B) Heavy chain (76.3% coverage)

FIG. 3

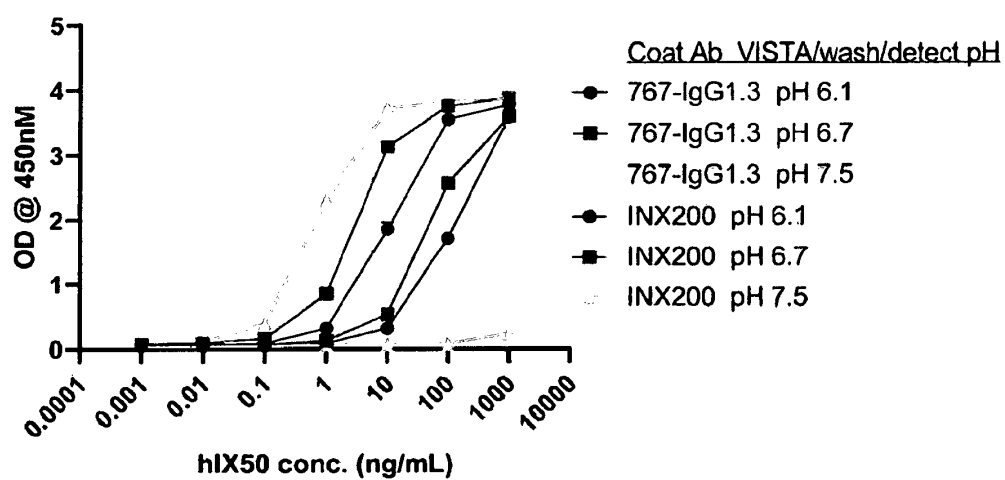


Figure 3: 767-IgG1.3 and INX200 exhibit opposite pH dependent binding characteristics.

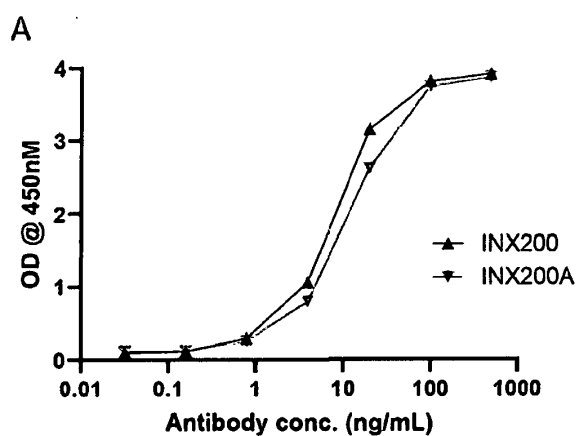
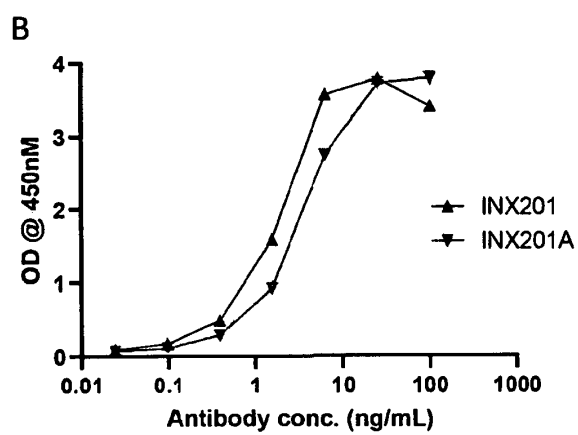
FIG. 4A**FIG. 4B**

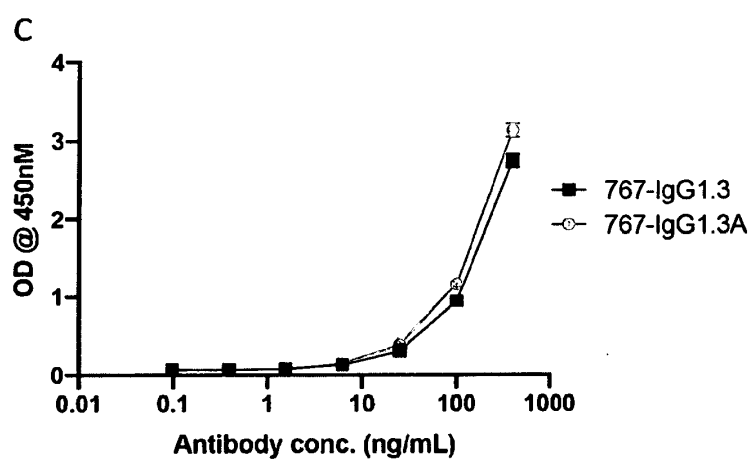
FIG. 4C

Figure 4A-C: DAR 8 conjugation with linker A does not impact VISTA binding of (A) INX200 (B) INX201 or (C) 767-IgG1.3.

FIG. 5

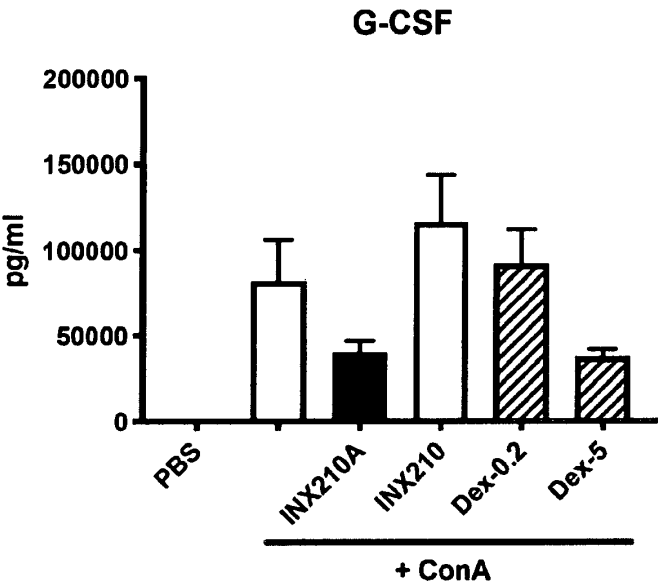


Figure 5: G-CSF changes at 6h post ConA in peripheral blood. Plasma concentrations measured using a mouse 7-plex (SEM; n=5/group)(Dosing: Dex-0.2= 0.2 mg/Kg, Dex-2 = 2mg/Kg, INX210 and INX210A at 10 mg/Kg, [INX210A provided 0.2mg/kg dex payload]).

FIG. 6

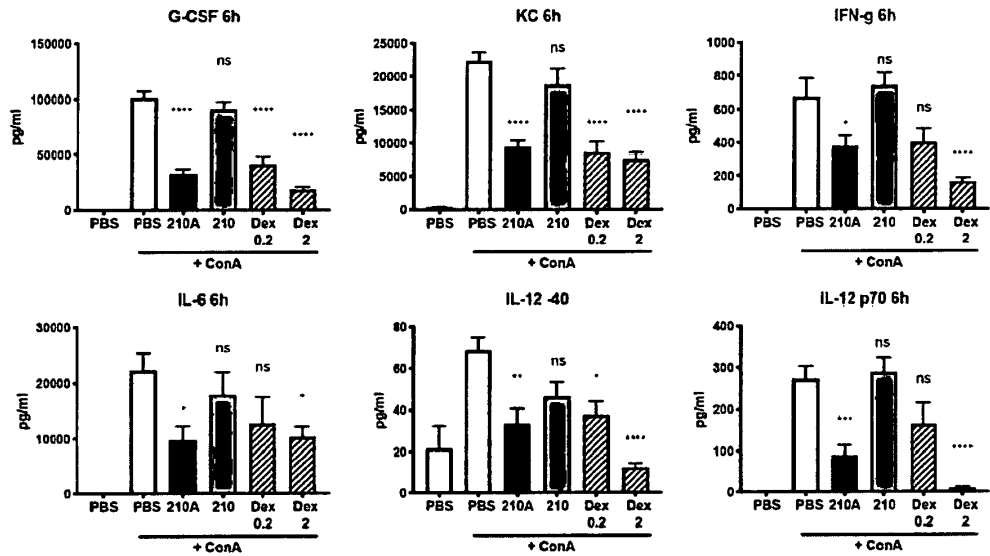


Figure 6: Cytokine changes at 6h post ConA in peripheral blood. Plasma concentrations measured using a mouse 7-plex (SEM; n=10/group, ordinary one-way ANOVA as compared to ConA-only group)(Dosing: Dex at 0.2 or 5 mg/Kg, INX210 and INX210A at 10 mg/Kg).

FIG. 7

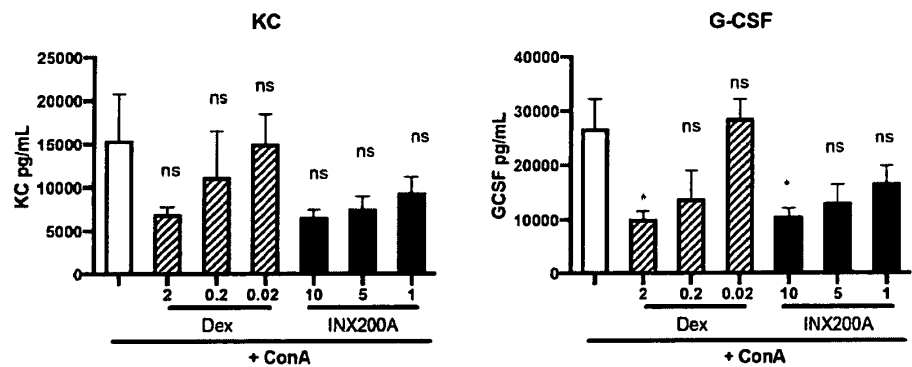


Figure 7: Cytokine changes at 6h post ConA in peripheral blood. Plasma concentrations measured using an ELISA assay (SD; n=6/group; one-way ANOVA as compared to ConA-only group) (Dosing: Dex at 0.02, 0.2 or 2 mg/Kg, INX200A at 10, 5 and 1 mg/Kg).

FIG. 8

Sequence Legend for INX200, INX201 and INX210

>VSTB92_VH
 QVQLVQSGAEVKKPGASVKVSCKASGYTFANYLIGWVRQAPGQRLEWMGDIYPGGGFISY
 NEKFGRVTITRDTASTAYMELSSLRSEDAVYYCARRFDYGGYFFDYWGQGTLLTVSS

>VSTB92_VL
 DIVMTQSPLSLPVTGPGEASISCRSSQSIVHSNGNIYLEWYLQKPGQSPQLLIYKVSNR
 SGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCFQGSHVPWTFGQGTLEIK

>IgG1_LALA
 ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSS
 GLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGG
 PSVFLFPPKPKDTLMISRTPEVTCVVDVSHRDPEVKFNWYVDGVEVHNAKTKPREEQYN
 STYRVVSVLTVLHQDWLNGKEYKCAVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE
 LTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRW
 QQGNVFSCSVMEALHNHYTQKSLSLSPGK

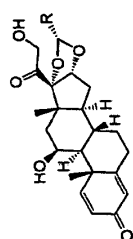
>IgG1_INXLALA
 ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSS
 GLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPEAAGG
 PSVFLFPPKPKDTLMISRTPEVTCVVDVSHRDPEVKFNWYVDGVEVHNAKTKPREEQYN
 STYRVVSVLTVLHQDWLNGKEYKCAVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE
 LTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRW
 QQGNVFSCSVMEALHNHYTQKSLSLSPGK

>IgG2_sigma
 ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSS
 GLYSLSSVTVTPSSNFGTQTYTCNVDHKPSNTKVDKTVKCCVECPPCAPPAAASSVF
 LFPPKPKDTLMISRTPEVTCVVDVSAEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTFR
 VVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKTKGQPREPQVYTLPPSREEMTKN
 QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPMLDSDGSFFLYSKLTVDKSRWQQGN
 VFSCSVMEALHNHYTQKSLSLSPGK

>Human_Kappa_Constant
 RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQD
 SKDSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

- INX200 = VSTB92 variable regions on human IgG1/kappa with L234A/L235A (LALA) mutations in the Fc
- INX201 = VSTB92 variable regions on human IgG1/kappa with L234A/L235A/E269R/K322A (INXLALA) mutations in the Fc
- INX210 = VSTB92 variable regions on human IgG2/kappa with V234A/G237A/P238S/H268A/V309L/A330S/P331S (IgG2 sigma) mutations in the Fc
- Signal sequences not shown

FIG. 9



budesonide derivatives

R = H, alkyl, spiroalkyl, aryl, heteroaryl, and alkyl, spiroalkyl, aryl, heteroaryl may be additionally substituted by alkyl, alkoxy, aryloxy, alkylaryl, alkylheteroaryl, amino, aminoalkyl, heteroalkylamino

in particular

R =

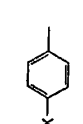
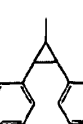
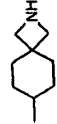
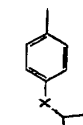
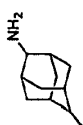
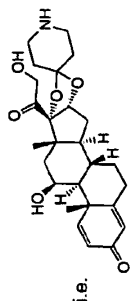
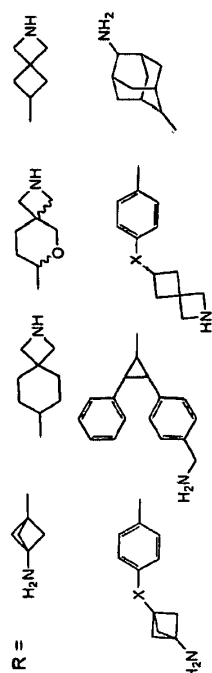


FIG. 10A

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (img)	Heavy-chain cd2 (img)	Heavy-chain YMDY (SEQ ID NO:102)	Light-chain cd1 (img)	Light-chain cd2 (img)	Light-chain cd3 (img)	Heavy-chain Variable (SEQ ID NO:106)	Heavy-chain Constant (SEQ ID NO:107)	Light-chain Variable (SEQ ID NO:108)	Light-chain Constant (SEQ ID NO:109)
GAI	Mouse IgG1/μappa	LLDSGLYCC LVVERHHH SEHRVH	GYLTDYN (SEQ ID NO:100)	INLWYAIT (SEQ ID NO:101)	ARGGYRYY YMDY (SEQ ID NO:102)	ENIYSN (SEQ ID NO:103)	AAT (SEQ ID NO:104)	QHPWGT RT (SEQ ID NO:105)	EVQLQQSGPELVKPG ASVNSCKASGYTLD YIMDWMVKQSHGKSL EWGCHINLYAITYN QKFKGKATLLVDKSSS TAYMELSLTSEDYAV YTCARGGYRYYAM DYWGQGSVTSS (SEQ ID NO:106)	ASTKGRSVFLAPCSSTSE STAAIGLVKDYFEPVTVS WNSGALTSQVMTFFAVLQ SSGLVLSVTVTPSSNFGT QTYTCNVDRHPSNTKVDK TYERKCCVCEPCCPAPPIA GPSVLEPPRPDGLMEST PEVTCVWDVSHDEPEVQF NWTVDGVEVHNKATPR EEQNSTFRVSVLTVVHQ DWLNGHEVKCYVSKGLP APIERTKTKGQPREPQVY TLPPSREEMTKNQSLTCL VKGPYSDAVVEWESNGQ PENNYKTTTPMLDSOGFF LYSKLTVDKSRWQQGVAF LSP GK (SEQ ID NO:107)	DIDMTQSPASLSVS VGETVITTCRASEHI YSRLAWYQQKQGR SPQLLYAATNLAD GVPSRFSGSGSGTQ YSKINSLSQSEDFGS YTCQHFMTGTPRTFG GGTKLEIK (SEQ ID NO:108)	RADAAPTYSI FPSEQLTSG GASVVFELNN FYPKDNVW KIDGERQNG VLNSWTDQD SKDSTYSMS TLLTKDEYER HNSYTCSEATH KTSYSPVASF MRNEC (SEQ ID NO:109)
GAI- IgG2	Human IgG2/μappa	LLDSGLYCC LVVERHHH SEHRVH	GYLTDYN (SEQ ID NO:110)	INLWYAIT (SEQ ID NO:111)	ARGGYRYY YMDY (SEQ ID NO:112)	ENIYSN (SEQ ID NO:113)	AAT (SEQ ID NO:114)	QHPWGT RT (SEQ ID NO:115)	EVQLQQSGPELVKPG ASVNSCKASGYTLD YIMDWMVKQSHGKSL EWGCHINLYAITYN QKFKGKATLLVDKSSS TAYMELSLTSEDYAV YTCARGGYRYYAM DYWGQGSVTSS (SEQ ID NO:116)	DWLNQHEVKCYVSKGLP APIERTKTKGQPREPQVY TLPPSREEMTKNQSLTCL VKGPYSDAVVEWESNGQ PENNYKTTTPMLDSOGFF LYSKLTVDKSRWQQGVAF LSP GK (SEQ ID NO:117)	DIDMTQSPASLSVS VGETVITTCRASEHI YSRLAWYQQKQGR SPQLLYAATNLAD GVPSRFSGSGSGTQ YSKINSLSQSEDFGS YTCQHFMTGTPRTFG GGTKLEIK (SEQ ID NO:118)	RTVAAPSVERF PPSEQLKSG TASVVCCLNN FYPKDNVW KIDGERQNG VLNSWTDQD SKDSTYSMS TLLTKDEYER HNSYTCSEATH KTSYSPVASF MRNEC (SEQ ID NO:119)
GG8	Mouse IgG1/γ	LLDSGLYCC LVVERHHH SEHRVH; GHDTYTK TWYRSRG EVQTC	GYSTGYT (SEQ ID NO:120)	INPYNGGI (SEQ ID NO:121)	ARRTLRPVF FDY (SEQ ID NO:122)	QSVSTFSY (SEQ ID NO:123)	YAS (SEQ ID NO:124)	QHSWEIPY T (SEQ ID NO:125)	EVQLQQSGPELVKPGTSM KICKASGYSTGYTMMHW VHDSHGKLEWIGUNLPYN GGINYNQKFAKATLLVOK SSSTAYMELSLTSEDSAVY YCARITLRLPYFFDYWGQ TLLVSS (SEQ ID NO:127)	DIVLTQSPAS LAVLQQRAT SCRASQSVST STFSYMHVY QKPGQPPK LUKYASNLK GUPARESGG SGDTFLNHP VEEDTATY CQHSWEIPT FGGKLEIK (SEQ ID NO:129)	DIVLTQSPASLSV GGRATISCBASQSV STFSYMHVYQQ APGQPKLKLKYN LESGVAPRSFGS GTDTFLNHPVEED TATYCCQHSWEIPY TFGGGKLEIK (SEQ ID NO:128)	DIVLTQSPAS LAVLQQRAT SCRASQSVST STFSYMHVY QKPGQPPK LUKYASNLK GUPARESGG SGDTFLNHP VEEDTATY CQHSWEIPT FGGKLEIK (SEQ ID NO:129)

FIG. 10B

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (img)	Heavy-chain cd2 (img)	Heavy-chain cd3 (img)	Light-chain cd1 (img)	Light-chain cd2 (img)	Light-chain cd3 (img)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
GG8- IgG2	Human IgG2/kappa	LLDSGLYCC LVIERHH SEHRVH; GHDVTFYK TWYRSRG EVQTC	GYSTGYT (SEQ ID NO:130)	INPYNGGI (SEQ ID NO:131)	ARRTLRPYF FDY (SEQ ID NO:132)	QSVSTSTSY (SEQ ID NO:133)	YAS (SEQ ID NO:134)	QHSWEIPY T (SEQ ID NO:135)	EVQLQQSGPELVKPG TSMRISCAISQSYFTG YIMWVVRQSHGKHL EWGLINPYNGGINV QVFKARATLVDMSSS TATYNELSLTSEDASV YTCARRTLRPYFDY WGCGTLTYSS (SEQ ID NO:136)	ASTKGPSVFPLAPCSRTSE STAALGCLVKDYFPEPVTVS WNSGALTSGVHTFPAVLQ SSGLYSLSVTVTPKSNIEGT QTYICNDVHKPSNTKVDK TYERKCCVCPCPAPPVA GPSVFLPPPKPKDTLMISRT PEVTCVVDVSHEDPEVQF EEQPNSTFRVSVLVVYHQ DWLNGKEYKCKVSNKGLP APIERTKTKNQPREPKQVY TLPSPREEMTKNQSLTCL VKGFPYSDIAVEVESNGQ PENNYKTPPMLDSGFF LYSKLVDSKRWQCGAVF SCSVWMEALHNHTQKSL LSPGK (SEQ ID NO:137)	DIVLTQSPASLAVSL GQRATISCRASQSV STSTSYMMHWYQQ KPGQPKLLIKYASN LESQVPARESGSGS GTDFTLNIHPVEED TATYYCQHSWEIPY TFGGGTLEIK (SEQ ID NO:138)	RTVAAPSVEI PPSEDEQAS GTASVCLLN NYPREANVQ WVVDHALQS GNSQSVTEQ DSKOSTYLSL TTLTKADYEK HKVYACEVTH QGLSPVTHSF NRGEC (SEQ ID NO:139)
IE8	Mouse IgG1/2	LLDSGLYCC LVVEIR	GFDSRYW (SEQ ID NO:140)	VPDSSTI (SEQ ID NO:141)	ARGRGDY (SEQ ID NO:142)	GNHHY (SEQ ID NO:143)	NAK (SEQ ID NO:144)	QNFWSPTF T (SEQ ID NO:145)	EVKLESGGLVQPG GSLKLSAASGDFPSR YMWVVRQAPGK LEWIGEVTPDSSTNY TPSLKDFILSRDIAK NTLYLQMIKVRSEDTA LYTCARGEDPWGQ GTSVYYS (SEQ ID NO:146)	ASTKGPSVFPLAPCSRTSE STAALGCLVKDYFPEPVTVS WNSGALTSGVHTFPAVLQ SSGLYSLSVTVTPKSNIEGT QTYICNDVHKPSNTKVDK TYERKCCVCPCPAPPVA GPSVFLPPPKPKDTLMISRT PEVTCVVDVSHEDPEVQF EEQPNSTFRVSVLVVYHQ DWLNGKEYKCKVSNKGLP APIERTKTKNQPREPKQVY TLPSPREEMTKNQSLTCL VKGFPYSDIAVEVESNGQ PENNYKTPPMLDSGFF LYSKLVDSKRWQCGAVF SCSVWMEALHNHTQKSL LSPGK (SEQ ID NO:147)	DICLMTQSPASLSAS VGETYITTCRASGNI HNYSWYHQKQK SPQLLVYNKLTAD GVPSRFSGSGSGTQ YSLKINSLOPEDFGS YTCQNFMTPTFTFG SGTKLEIK (SEQ ID NO:148)	RTVAAPSVEI PPSEDEQAS GTASVCLLN NYPREANVQ WVVDHALQS GNSQSVTEQ DSKOSTYLSL TTLTKADYEK HKVYACEVTH QGLSPVTHSF NRGEC (SEQ ID NO:149)

FIG. 10C

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (imgt)	Heavy-chain cd2 (imgt)	Heavy-chain cd3 (imgt)	Light-chain cd1 (imgt)	Light-chain cd2 (imgt)	Light-chain cd3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
IE8-IgG2	Human IgG2/kappa	LLDSGLVCC LWVEIR	GFDFSRVW (SEQ ID NO:150)	VYPDSTI (SEQ ID NO:151)	ARGRGDY (SEQ ID NO:152)	GNIHNY (SEQ ID NO:153)	NAK (SEQ ID NO:154)	QNFWSPTF T (SEQ ID NO:155)	EVKLESGGGLVQPG GSLKSCAASGDFSR YIMSWVRQAPGKG LEWIGEVYPPDSSTNY TSLKDKFIISRDNK NTLVLDKIKVRSIEDTA LYTCARGEDYWGQ	ASTKGPSVFLAPSSRSTSE STAALGGLVNDYFPEPTVVS WNSGALTSQVHTPAVLQ SSGLVLSQVTPSPSIFGT QTYTCQVNDHPSNTKVDK TYERKCCYCPCPAPPIVA GPSVLEPPKPKDTLMISRT PEVTCVVDVDSHEDPEVQF EQQNSTFRVSVLVVHHQ DWLNGKEYKCVSNKGLP APIKTSKTKGQPREPQVY TLPSPREMTNQNQLTCL VKGFPYSDIAVWEESNGQ PENNYKTTTPMLDSGSEFF LYSLKLVDSRWQGNVIF SCSVNHEALNNHTQSLSL LSPGK (SEQ ID NO:157)	DIQMTQSPASLSAS VGETYITTCRSGRI HNKLSWYHQKQKQK SPQLLVNNAKTAD GVPSRFSGSGSGTQ YSLKINSIQPEDFGS YTCQNFWSPTPTFG SGTKLEIK (SEQ ID NO:158)	RTVAAPSVEIF PPDEQLKSG TASVYCLNN PYPRKAVQ WIKDVALQS GNSQSVTEQ DSKQSTYLSL TLLSKADYEK HKVYACEVTH QGLSPVTKSF NIRGEC (SEQ ID NO:159)
IE8-IgG2- C3275	Human mutated IgG2/kappa	LLDSGLVCC LWVEIR	GFDFSRVW (SEQ ID NO:160)	VYPDSTI (SEQ ID NO:161)	ARGRGDY (SEQ ID NO:162)	GNIHNY (SEQ ID NO:163)	NAK (SEQ ID NO:164)	QNFWSPTF T (SEQ ID NO:165)	EVKLESGGGLVQPG GSLKSCAASGDFSR YIMSWVRQAPGKG LEWIGEVYPPDSSTNY TSLKDKFIISRDNK NTLVLDKIKVRSIEDTA LYTCARGEDYWGQ	ASTKGPSVFLAPSSRSTSE STAALGGLVNDYFPEPTVVS WNSGALTSQVHTPAVLQ SSGLVLSQVTPSPSIFGT QTYTCQVNDHPSNTKVDK TYERKCCYCPCPAPPIVA GPSVLEPPKPKDTLMISRT PEVTCVVDVDSHEDPEVQF EQQNSTFRVSVLVVHHQ DWLNGKEYKCVSNKGLP APIKTSKTKGQPREPQVY TLPSPREMTNQNQLTCL VKGFPYSDIAVWEESNGQ PENNYKTTTPMLDSGSEFF LYSLKLVDSRWQGNVIF SCSVNHEALNNHTQSLSL LSPGK (SEQ ID NO:167)	DIQMTQSPASLSAS VGETYITTCRSGRI HNKLSWYHQKQKQK SPQLLVNNAKTAD GVPSRFSGSGSGTQ YSLKINSIQPEDFGS YTCQNFWSPTPTFG SGTKLEIK (SEQ ID NO:168)	RTVAAPSVEIF PPDEQLKSG TASVYCLNN PYPRKAVQ WIKDVALQS GNSQSVTEQ DSKQSTYLSL TLLSKADYEK HKVYACEVTH QGLSPVTKSF NIRGEC (SEQ ID NO:169)

FIG. 10D

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr3 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB100	Human IgG1/kappa	Group 1	GYFTSYW (SEQ ID NO:170)	YPGSDT (SEQ ID NO:171)	ARDVSEFYGV SPMFYV	QSVSSY (SEQ ID NO:173)	DAS (SEQ ID NO:174)	QQRSNWP LT	EVQLVQSGAEVKKPG ESLKISCKGSGYFTSY WIGWVRQMPGKGL WAGIYVPGSDTRY PSFGQVTSADKSI TAYLOWSSLASDTA MYTCARDVSSFYGV PMFDWGGGLTVV SS	EVLTQSPATLELSPG ERATLSCHASQVSS YLAWYQQKPGQAP RLYVDASNRATGIP ARFSGSGSDTFLT ISLLEPEDFAYVYCQ QQRNWPATFGGQT KVEIK (SEQ ID NO:178)	RTVAAPSVEIF PRSDQLKSG TASVYCLLN YPREARVQ WIKVONALQS GNISQESVTEQ DSKOSTYSLSS TITLSNADYER HKVYACEVTH QQLSPVTKSF NRGEC (SEQ ID NO:179)
V5TB101	Human IgG1/kappa	V5TB101 Group 1	GYFTSYW (SEQ ID NO:180)	YPGSDT (SEQ ID NO:181)	ARDVSEFYGV YSALDY	QSVSSY (SEQ ID NO:183)	GAS (SEQ ID NO:184)	QQYGSPL T	EVQLVQSGAEVKKPG ESLKISCKGSGYFTSY WIGWVRQMPGKGL WAGIYVPGSDTRY PSFGQVTSADKSI TAYLOWSSLASDTA MYTCARDVSSFYGV ALLDYWGGGLTVV S	EVLTQSPATLELSPG ERATLSCHASQVSS SYLAWYQQKPGQAP RLIYVQASRATGIP DRFSGSGSDTFLT ISRLPEDEFAVYVYCQ VEIK (SEQ ID NO:188)	RTVAAPSVEIF PRSDQLKSG TASVYCLLN YPREARVQ WIKVONALQS GNISQESVTEQ DSKOSTYSLSS TITLSNADYER HKVYACEVTH QQLSPVTKSF NRGEC (SEQ ID NO:189)

FIG. 10E

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (imgt)	Heavy-chain cd2 (imgt)	Heavy-chain cd3 (imgt)	Light-chain cd1 (imgt)	Light-chain cd2 (imgt)	Light-chain cd3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
VSTB102	Human IgG1/kappa	Group 1	GYFTSYW (SEQ ID NO:190)	HPGSDT (SEQ ID NO:191)	ARDYFYGII TPVLDY (SEQ ID NO:192)	QSVSSY (SEQ ID NO:193)	GAS (SEQ ID NO:194)	QVYGSPL T (SEQ ID NO:195)	EVQLVDSGAEVKNPG ESLKSICGSGYFTSY WIGWVRQMPKGLG WAGINYPGSDTRY PSFQGVTSADKSI TAYLQWSLSKASDTA MYTCARDDALYGVY PILDWGGGTLTVYS S (SEQ ID NO:196)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPVTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTPVPSLSLG TQTYICNVNHKPSNTKVOK KVEPKSCDKHTCTCPCPAP ELLGGPSVFLFPPKADTLIM ELGGPSVFLFPPKADTLIM ISRTPEVTCVVVDVSHEDPE VKFNWYVDGVEVHNKAT KPREEQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPKEIKSKANGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GDPENNYMTTPPVLDSDGS FFLYSKLTVDKSRWQQGN VFLSCVNHHEALHNYTQK SLSLPGK (SEQ ID NO:197)	EIVLTQSPGTLSLSPG ERATLSCIRASQSVSS SYLAWYQKPKQA PRLUYGASSRATGIP DRFSGSGGTDFLT ISRLEPEDAVYTCQ QVSSSPITFGQTK VEIK (SEQ ID NO:198)	RTVAAPSVEIF PPSQEQLKSG TASVGLLNN FPYREARVQ WVYDVALQS GNSQSVTEQ DSKSTYSLS TLLSKADYER HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:199)
VSTB103 INX504	Human IgG1/kappa	VSTB101 Group 1	GYFTSYW (SEQ ID NO:200)	HPGSDT (SEQ ID NO:201)	ARDALYGG YYLDY (SEQ ID NO:202)	QSVLYSSNNK NY (SEQ ID NO:203)	WAS (SEQ ID NO:204)	QVYSTPLT (SEQ ID NO:205)	EVQLVDSGAEVKNPG ESLKSICGSGYFTSY WIGWVRQMPKGLG WAGINYPGSDTRY PSFQGVTSADKSI TAYLQWSLSKASDTA MYTCARDDALYGVY PILDWGGGTLTVYS S (SEQ ID NO:206)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPVTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTPVPSLSLG TQTYICNVNHKPSNTKVOK KVEPKSCDKHTCTCPCPAP ELLGGPSVFLFPPKADTLIM ELGGPSVFLFPPKADTLIM ISRTPEVTCVVVDVSHEDPE VKFNWYVDGVEVHNKAT KPREEQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPKEIKSKANGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GDPENNYMTTPPVLDSDGS FFLYSKLTVDKSRWQQGN VFLSCVNHHEALHNYTQK SLSLPGK (SEQ ID NO:207)	DIVMTQSPDLSLAVS LGERATINCKSSQSV LYSSNNKNYLAWYQ QKPGQPKPLLYWA STRSGVPPDRFSQS GSGTDFLTLSLQA EDVAVYTCQYYSY PLTFGGGTNEIK (SEQ ID NO:208)	RTVAAPSVEIF PPSQEQLKSG TASVGLLNN FPYREARVQ WVYDVALQS GNSQSVTEQ DSKSTYSLS TLLSKADYER HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:209)

FIG. 10F

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr2 (imgt)	Heavy-chain cdr3 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB104	Human IgG1/kappa	Group 1	GYSTSYW (SEQ ID NO:210)	IVPGSOT (SEQ ID NO:211)	ARDANSFY AASFDY (SEQ ID NO:212)	QSVLYSNMK NY (SEQ ID NO:213)	WAS (SEQ ID NO:214)	QVYSTPLT (SEQ ID NO:215)	EVQLVQSGAEVKNPG ESLKICKSGSYSTSY WIGWVRQMPKGLG WIMGIWPGDSITRY PSFGQVTSADKSI TAYLQWSSLSKSDTA MYTCARDANSFYAA SIFDWVQGGTLVYS S (SEQ ID NO:216)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSSVVPSSSLG TQTYICHVNHKPSNTKDK KVEPKSCDKTHTCPCPAP ELGGPSVLPFPPPKDTLM ISRTPFTCVVVDVSHEDPE VKFNWYVDGVEVHNART KPREEQYNSTRYRVSVLT LHQDWLNGKEYKCKVSNK ALPAPERTISKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGIPYSDIAVEWESN GQPENNYKTPPVLDSDGS FELYSKLTVDKSRM/QDGN VFCSVMEALHNHTQK SLSLPGK (SEQ ID NO:217)	DIVMTQSPDSLAIV LGERATINCKSSQSV LYSNNNINLAWYQ QKPGQPKLLYWYA DSKSTYSLS TTLTKADYEK HIVYACEVTH GSGTDFTLTSLQA EDVAVYCCQYMYST PLTGGQGTKEIK (SEQ ID NO:218)	RTVAAPSVEIF PFSDEQLSG TASVQCLNN FYPREAKVQ WKVDNALQS GNSQESVTEQ DSKSTYSLS TTLTKADYEK HIVYACEVTH QGLSPVITNSF NRGEC (SEQ ID NO:219)
V5TB105	Human IgG1/kappa	Group 1	GGTFSSYA (SEQ ID NO:220)	IIPIFGTA (SEQ ID NO:221)	ARSSYGWSY EFDY (SEQ ID NO:222)	QSIATN (SEQ ID NO:223)	AAS (SEQ ID NO:224)	QQNDORPI T (SEQ ID NO:225)	QVQLVQSGAEVKNPG SSVVKSCASGDTFS YAIWVRQAPGQGLE WMGGIPIFGTANVA QNFGRVITADEST TAYMELSLRSEDSTAV YTCARSSYGWSEYFD YWGQGTLLVYSS (SEQ ID NO:226)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSSVVPSSSLG TQTYICHVNHKPSNTKDK KVEPKSCDKTHTCPCPAP ELGGPSVLPFPPPKDTLM ISRTPFTCVVVDVSHEDPE VKFNWYVDGVEVHNART KPREEQYNSTRYRVSVLT LHQDWLNGKEYKCKVSNK ALPAPERTISKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGIPYSDIAVEWESN GQPENNYKTPPVLDSDGS FELYSKLTVDKSRM/QDGN VFCSVMEALHNHTQK SLSLPGK (SEQ ID NO:227)	DIQMTQSPSSLSAS VGDRVITTCRAQSQSI ATNLHWYQKMPGK APKLIYAASLSQSG VPSRFGSGSGTDFT LTSLQPEDFAITYC QQNDORITFGQGT KVEIK (SEQ ID NO:228)	RTVAAPSVEIF PFSDEQLSG TASVQCLNN FYPREAKVQ WKVDNALQS GNSQESVTEQ DSKSTYSLS TTLTKADYEK HIVYACEVTH QGLSPVITNSF NRGEC (SEQ ID NO:229)

FIG. 10G

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (img)	Heavy-chain cd2 (img)	Heavy-chain cd3 (img)	Light-chain cd1 (img)	Light-chain cd2 (img)	Light-chain cd3 (img)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
VSTB106 INX915	Human IgG1/kappa	Group 1	GGTSSYA (SEQ ID NO:230)	IPIHGT (SEQ ID NO:231)	ARSSYGSWY EFDY (SEQ ID NO:232)	QSIKTD (SEQ ID NO:233)	SAS (SEQ ID NO:234)	QNIERTPT (SEQ ID NO:235)	QVQLVQSGAEVKMPG SSVVKSCASGCTFS YAIWVWQAPGGGLE WMGGIPIFGTANYA QIFGGRVITADESTS TAYNELSLRSEDITAV YICARSSYGSWYFED YWGQGLTVYSS (SEQ ID NO:236)	ASTKGPSVFPLAPSSKSTSG GTAAIGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTPSSSLG TQTYKNVNHKPSNTKVK KVEPKSCDKTCTCPDAP ELGGPSVLEPPKPDRLM ISRTPEVTCVVVDVSHEDPE VKFNWYVDGVEVHNKAT KPREEQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPERTISKANGQPREP QVYTPPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPNENYKTTTPPLDSGDS FFLYSKLTVDKSRWQQGN VFCSSVMEALHNHTQK SLSLPGK (SEQ ID NO:237)	DIQMTQSPSSLSAS VGDRTVITCRASQSI RDLNHWYQQKPKG APKLIVASISLQSG VPSRFSGSGSDFT LTISLQPEDFATYYC QQNRTPTFGQGT KVEIK (SEQ ID NO:238)	RTVAAPSVEIF PPSEQLKSG TASVCLLN FYPREAKVQ WKVDNALQS GNSQSVTEQ DSKOSTYLSL TTLTKADYEK HKIVACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:239)
VSTB107 INX916	Human IgG1/kappa	Group 1	GGTSSYA (SEQ ID NO:240)	IPIHGT (SEQ ID NO:241)	ARSSYGSWY EFDY (SEQ ID NO:242)	QSIKND (SEQ ID NO:243)	AAS (SEQ ID NO:244)	QNIWRTPI T (SEQ ID NO:245)	QVQLVQSGAEVKHFG SSVVKSCASGCTFS YAIWVWQAPGGGLE WMGGIPIFGTANYA QIFGGRVITADESTS TAYNELSLRSEDITAV YICARSSYGSWYFED YWGQGLTVYSS (SEQ ID NO:246)	ASTKGPSVFPLAPSSKSTSG GTAAIGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTPSSSLG TQTYKNVNHKPSNTKVK KVEPKSCDKTCTCPDAP ELGGPSVLEPPKPDRLM ISRTPEVTCVVVDVSHEDPE VKFNWYVDGVEVHNKAT KPREEQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPERTISKANGQPREP QVYTPPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPNENYKTTTPPLDSGDS FFLYSKLTVDKSRWQQGN VFCSSVMEALHNHTQK SLSLPGK (SEQ ID NO:247)	DIQMTQSPSSLSAS VGDRTVITCRASQSI RDLNHWYQQKPKG APKLIVASISLQSG VPSRFSGSGSDFT LTISLQPEDFATYYC QQNRTPTFGQGT KVEIK (SEQ ID NO:248)	RTVAAPSVEIF PPSEQLKSG TASVCLLN FYPREAKVQ WKVDNALQS GNSQSVTEQ DSKOSTYLSL TTLTKADYEK HKIVACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:249)

FIG. 10H

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (imgt)	Heavy-chain cd2 (imgt)	Heavy-chain cd3 (imgt)	Light-chain cd1 (imgt)	Light-chain cd2 (imgt)	Light-chain cd3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
VSTB108	Human IgG1/kappa	Group 1	GGTSSYA (SEQ ID NO:250)	IPIPGTA (SEQ ID NO:251)	ARITFCW5G ELOY (SEQ ID NO:252)	QSIENR (SEQ ID NO:253)	SAS (SEQ ID NO:254)	QQNIIDNPI T (SEQ ID NO:255)	QQLVDSGAEVKPG SSVKSCKASGGTFS VAISWVRQAPGGGLE WMAGGIPIGTANYA QKFGRIITADIST TAYMELSRSEDTAV YYCARISYGVSEED YWGQGLTVYSS (SEQ ID NO:256)	ASTKGPSVPLAPSSKSTSG GTAALGCLVKQYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYICNVNHHPSNTKVDK NVEPKSCDKHTCCPPAP ELLGGPSVLEFPPPKADTLN ERRTPVTCQAVDUSHEDE VKRWYDQGVVEVHNART KPREEQYNSTRVRSVLTV LHQDWLNGKEYKCKVSNK ALPAPKEIKTAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPENNYKTTTPVLDSDGS FFLYSKLTVDKSRWQQGN VFSICSVMHAEALHNHTYQK SLSLSPGK (SEQ ID NO:257)	DIQMTQSPSSLSAS VGDRTVITCRASQSI SNRLNWYQQKPGK APKLLIYAASLQSG VPSRFSGSGSGTDFT LTSSLPQEDFATYYC QIHNHNPTFCQG YVEIK (SEQ ID NO:258)	RTVAAPSVEF PPSDEQLKSG TASVWCLLN FYPREAKVQ WKVDNALQGS GNSQESVTEQ DSKDSYSLSS TLLSKADYER HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:259)
			GGTSSYA (SEQ ID NO:260)	IPIPGTA (SEQ ID NO:261)	ARSSYGVSWY EFOY (SEQ ID NO:262)	QSIATY (SEQ ID NO:263)	AAS (SEQ ID NO:264)	QQNHRPI T (SEQ ID NO:265)	QQLVDSGAEVKPG SSVKSCKASGGTFS VAISWVRQAPGGGLE WMAGGIPIGTANYA QKFGRIITADIST TAYMELSRSEDTAV YYCARISYGVSEED YWGQGLTVYSS (SEQ ID NO:266)	ASTKGPSVPLAPSSKSTSG GTAALGCLVKQYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYICNVNHHPSNTKVDK NVEPKSCDKHTCCPPAP ELLGGPSVLEFPPPKADTLN ERRTPVTCQAVDUSHEDE VKRWYDQGVVEVHNART KPREEQYNSTRVRSVLTV LHQDWLNGKEYKCKVSNK ALPAPKEIKTAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPENNYKTTTPVLDSDGS FFLYSKLTVDKSRWQQGN VFSICSVMHAEALHNHTYQK SLSLSPGK (SEQ ID NO:267)	DIQMTQSPSSLSAS VGDRTVITCRASQSI ATYLNWYQQKPGK APKLLIYAASLQSG VPSRFSGSGSGTDFT LTSSLPQEDFATYYC QQNHNHNPTFCQG YVEIK (SEQ ID NO:268)	RTVAAPSVEF PPSDEQLKSG TASVWCLLN FYPREAKVQ WKVDNALQGS GNSQESVTEQ DSKDSYSLSS TLLSKADYER HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:269)
VSTB109	Human IgG1/kappa	Group 1										

FIG. 10I

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr2 (imgt)	Heavy-chain cdr3 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB110 INX917	Human IgG1/kappa	Group 1	GGTFSSYA (SEQ ID NO:270)	IPPIFGTA (SEQ ID NO:271)	ARISIGWVA ELDY (SEQ ID NO:272)	QSIWTD (SEQ ID NO:273)	AAS (SEQ ID NO:274)	QQGASDPI T (SEQ ID NO:275)	QVQLVSGAEVKPG SSVNSCKASGGTFSS YAISSWRQAPGGGLE WMGGIPIFGTANYA QIFQGRVITADESTS TAYNELSLRSEDYAV YYCARHSIGWVAELD YWGQGLTVYSS (SEQ ID NO:276)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSSVTPFSSIG TOTTCNVNHRPSNTKUDK KVEPKSCDKHTCTCPDAP ELLGGPSVFLPPRPKPDRLM ISRTPEVTCVQVDSHEDPE VKRWYVDGVEVHNATK KPREQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPIETFSKAKGQPREP QVTLPPSDELTKNQVSL TCLVKGYPFSDIAVEWESN GQPNENYKTPPPLDSGGS FLYSKLTVDKSRWQQGN VFSCSVHHEALHNHTQK SLSLPCK (SEQ ID NO:277)	DIQMTQSPFSLAS VGDRVITTCRASQSI NTDLNHWYQQKPKG APKLIVYAASLIQSG VPSRFSGSGSGTDFT LTSLQPEDFATYYC QQGASQPTFGQGT KVEIK (SEQ ID NO:278)	RTVAAPSVEIF PPSDEQLKSG TASVCLLN FYPREARVQ WKVDNALQS GNSQSVTEQ DSKDSYLS TLLSKADYEK HKVYACEVTH QGLSPVINSF NRGEC (SEQ ID NO:279)
V5TB111	Human IgG1/kappa	Group 1	GGTFSSYA (SEQ ID NO:280)	IPPIFGTA (SEQ ID NO:281)	ARSSYGWSY EFDY (SEQ ID NO:282)	QSIWTD (SEQ ID NO:283)	AAS (SEQ ID NO:284)	QQNRGSP T (SEQ ID NO:285)	QVQLVSGAEVKPG SSVNSCKASGGTFSS YAISSWRQAPGGGLE WMGGIPIFGTANYA QIFQGRVITADESTS TAYNELSLRSEDYAV YYCARSSYGWSYED YWGQGLTVYSS (SEQ ID NO:286)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSSVTPFSSIG TOTTCNVNHRPSNTKUDK KVEPKSCDKHTCTCPDAP ELLGGPSVFLPPRPKPDRLM ISRTPEVTCVQVDSHEDPE VKRWYVDGVEVHNATK KPREQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPIETFSKAKGQPREP QVTLPPSDELTKNQVSL TCLVKGYPFSDIAVEWESN GQPNENYKTPPPLDSGGS FLYSKLTVDKSRWQQGN VFSCSVHHEALHNHTQK SLSLPCK (SEQ ID NO:287)	DIQMTQSPFSLAS VGDRVITTCRASQSI NTDLNHWYQQKPKG APKLIVYAASLIQSG VPSRFSGSGSGTDFT LTSLQPEDFATYYC QQNRGSPITFGQGT KVEIK (SEQ ID NO:288)	RTVAAPSVEIF PPSDEQLKSG TASVCLLN FYPREARVQ WKVDNALQS GNSQSVTEQ DSKDSYLS TLLSKADYEK HKVYACEVTH QGLSPVINSF NRGEC (SEQ ID NO:289)

FIG. 10J

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (imgt)	Heavy-chain cd2 (imgt)	Heavy-chain cd3 (imgt)	Light-chain cd1 (imgt)	Light-chain cd2 (imgt)	Light-chain cd3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB113 INX918	Human IgG1/kappa	Group 1	GGTSSYA (SEQ ID NO:290)	IPIFGTA (SEQ ID NO:291)	ARIHIGWA ELDY (SEQ ID NO:292)	QSIATD (SEQ ID NO:293)	AAS (SEQ ID NO:294)	QQAIIWY LT (SEQ ID NO:295)	QVQLVQSGAEVKMPG SSVYKSCASGGTFS YASWVRQAPGGGLE WMGGIPIFGTANYA QKQGRVITTADESTS TAYMELSLRSEDYAV YKCARHIGWVAELD YMGQGLTVYSS (SEQ ID NO:296)	ASTKGPSVPLAPSSISSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYKNVNHKPSNTVOK KVEPESCDTHLTCPDAP ELGGPSVLEPPPKADTLIM ISRTPEVTCVVVDVSHEDPE VKFNWYVDGVEVHNKAT KPREEQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPKEIKTSKANGQPREP QVYTLPPSRDELTKNQVSL TCLVGFPPYSDIAVEWESN GQPENNYKTPPPLVDSDGS FFYSLTVOKSRWQDGN VFCSCVMHEALHNHYTQK SLSLSPGK (SEQ ID NO:297)	DIQMTQSPSSLSAS VGDRTVITCRASQSI ATDLNHWYQQPGK APKLIYYASLSQSG VPSRFSGSGGTFT LTISLQPEDFATYYC QQAWYPLTFGGG TKVEIK (SEQ ID NO:298)	RTVAAPSVEIF PPSDQLSG TASVCLLN FYPREARVQ WKVDNALQS GNSQESVTEQ DSKSTYLSL TTLTKADYER HKVYACEVTH QGLESPTVMSF NRGEC (SEQ ID NO:299)
V5TB114	Human IgG1/kappa	Group 1	GGTSSYA (SEQ ID NO:300)	IPIFGTA (SEQ ID NO:301)	ARIHIGWA ELDY (SEQ ID NO:302)	QSIATS (SEQ ID NO:303)	YAS (SEQ ID NO:304)	QQAAYPL T (SEQ ID NO:305)	QVQLVQSGAEVKMPG SSVYKSCASGGTFS YASWVRQAPGGGLE WMGGIPIFGTANYA QKQGRVITTADESTS TAYMELSLRSEDYAV YKCARHIGWVAELD YMGQGLTVYSS (SEQ ID NO:306)	ASTKGPSVPLAPSSISSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYKNVNHKPSNTVOK KVEPESCDTHLTCPDAP ELGGPSVLEPPPKADTLIM ISRTPEVTCVVVDVSHEDPE VKFNWYVDGVEVHNKAT KPREEQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPKEIKTSKANGQPREP QVYTLPPSRDELTKNQVSL TCLVGFPPYSDIAVEWESN GQPENNYKTPPPLVDSDGS FFYSLTVOKSRWQDGN VFCSCVMHEALHNHYTQK SLSLSPGK (SEQ ID NO:307)	DIQMTQSPSSLSAS VGDRTVITCRASQSI ATSLNHWYQQPGK APKLIYYASLSQSG VPSRFSGSGGTFT LTISLQPEDFATYYC QQGAWYPLTFGGG TKVEIK (SEQ ID NO:308)	RTVAAPSVEIF PPSDQLSG TASVCLLN FYPREARVQ WKVDNALQS GNSQESVTEQ DSKSTYLSL TTLTKADYER HKVYACEVTH QGLESPTVMSF NRGEC (SEQ ID NO:309)

FIG. 10K

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (img)	Heavy-chain cd2 (img)	Heavy-chain cd3 (img)	Light-chain cd1 (img)	Light-chain cd2 (img)	Light-chain cd3 (img)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
VSTB115 INX919	Human IgG1/kappa	Group 1	GGTFSSYA (SEQ ID NO:310)	IIPHGTA (SEQ ID NO:311)	ARSSYGWSY EFDY (SEQ ID NO:312)	QDIRY (SEQ ID NO:313)	AAS (SEQ ID NO:314)	QDAYSNPI T (SEQ ID NO:315)	QVQLVDSGAELVKPG SSVKSCKASGGTFSS YASVWVRQAPGGGLE WMGGIPIGTANYA QFGGRVITADESTS TAYNELSLRSEDYAV YYCARSSYGWSEYFD YWGQGLTVYSS (SEQ ID NO:316)	ASTKGPSVFLAPSSSSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTPSSSLG TOTYICNVNHPSTKVDK KVEPKSCDKHTCTCPDAP ELGGPSVLEPPRKHDTLM ISRTPETCVVDVSHEDPE VKFNWYVDGVEVHNART KPREEQYNSTYRVSVLT LHQDWLNGKEYCKVSNK ALPAPIETISKANKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPEENNYKTPPPLDSGGS FFLYSKLTVDKSRWQQGN VFCISVMHEALHNHTQK SLSLPGK (SEQ ID NO:317)	DQMTQSPSLSAS VGDRTITTCRAQSQSI RTYLNWYQQKPGK APKLLIYAASLIQSG VPSRFSGSGSGTDFT LTISLQPEDFATYYC QQAYSNPTFGQGT KVEIK (SEQ ID NO:318)	RTVAAPSVEIF PPSQELLEG TASVVCCLNN FYPREAKVQ WKVDNALQDS GNSQESVTEQ DSKOSTYLS TTLTKADYEK HNVYACEVTH QGLSPRVTKSF NRGEC (SEQ ID NO:319)
VSTB116	Human IgG1/kappa	Group 1	GGTFSSYA (SEQ ID NO:320)	IIPHGTA (SEQ ID NO:321)	ARSSYGWSY EFDY (SEQ ID NO:322)	QSIMTN (SEQ ID NO:323)	AAS (SEQ ID NO:324)	QDAYSNPI T (SEQ ID NO:325)	QVQLVDSGAELVKPG SSVKSCKASGGTFSS YASVWVRQAPGGGLE WMGGIPIGTANYA QFGGRVITADESTS TAYNELSLRSEDYAV YYCARSSYGWSEYFD YWGQGLTVYSS (SEQ ID NO:326)	ASTKGPSVFLAPSSSSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTPSSSLG TOTYICNVNHPSTKVDK KVEPKSCDKHTCTCPDAP ELGGPSVLEPPRKHDTLM ISRTPETCVVDVSHEDPE VKFNWYVDGVEVHNART KPREEQYNSTYRVSVLT LHQDWLNGKEYCKVSNK ALPAPIETISKANKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPEENNYKTPPPLDSGGS FFLYSKLTVDKSRWQQGN VFCISVMHEALHNHTQK SLSLPGK (SEQ ID NO:327)	DQMTQSPSLSAS VGDRTITTCRAQSQSI RTYLNWYQQKPGK APKLLIYAASLIQSG VPSRFSGSGSGTDFT LTISLQPEDFATYYC QQAYSNPTFGQGT KVEIK (SEQ ID NO:328)	RTVAAPSVEIF PPSQELLEG TASVVCCLNN FYPREAKVQ WKVDNALQDS GNSQESVTEQ DSKOSTYLS TTLTKADYEK HNVYACEVTH QGLSPRVTKSF NRGEC (SEQ ID NO:329)

FIG. 10L

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (imgt)	Heavy-chain cd2 (imgt)	Heavy-chain cd3 (imgt)	Light-chain cd1 (imgt)	Light-chain cd2 (imgt)	Light-chain cd3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
VST649	Human IgG1/kappa	Group 1	GYTPSHT (SEQ ID NO:330)	INPRDST (SEQ ID NO:331)	ARGIRGYTM DY (SEQ ID NO:332)	ESVONYGLSF (SEQ ID NO:333)	GAS (SEQ ID NO:334)	QDSKVPY T (SEQ ID NO:335)	QVQLVQSGAEVKNPG ASVIVSKASGYTPFS HTHHVVRQAPGQRL WIMGSYPFIDITVYQ NFKDRVITITRTSAST ATMELSLRSEDATVY YCARIGIRGYTMIDY CGGTIVTYS (SEQ ID NO:336)	ASTKGPSVPLAPSSKSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYICNVNHKPSNTKYOK KVEPKSCDKHTCTCPDAP ELGGPSVLEPKKHOTLM HRTPEVTCVVVDVSHEDPE VKRWYQGVGVHNAKT KPREEQYNSTRYVSILTV LHQDWLNGKEVCKNSNK ALPAPKEIKSKANGQPREP QVYLPPTPRDELTKNQVSL TCLVKGFPYSDIAVEWESN GDPENNYKTTTPYLDSDGS FFYISKLVDSKRWQDGN VFSCVVMHEALHNHYTQK SLSLPGK (SEQ ID NO:337)	DVIMTQSPILSPVT LGQPASISCRASESV DNYGLSFMMHWQQL RPGQSPRLRYGAS NQGSQVPRFSGSG SGTDFTLKISRVEAE DIVGVYCCQSHKEWP YTFGGGTLEIK (SEQ ID NO:338)	RTVAAPSVFIF PPSQQLKSG TASVGLCLNN FPREAKVQ WKVDNALQGS GNSQESVTEQ DSKDSYSLSS TLLSKADYER HKVYACEVTH QGLSPRVTKSF NRGEC (SEQ ID NO:339)
VST650 INX500	Human IgG1/kappa	N1LLD5GL and VQTKDAP SHC Group 2	GYFTNMG (SEQ ID NO:340)	INPTGEP (SEQ ID NO:341)	AREGYGVNIF PY (SEQ ID NO:342)	ESVDYANSL (SEQ ID NO:343)	RAS (SEQ ID NO:344)	QQTNEPR T (SEQ ID NO:345)	QVQLVQSGSELKPKG ASVIVSKASGYFTFN YGLNHWVRQAPGGL EWMGWINPYTGEPT YADDFKGRFVSLDTS VSTAILQLCSKAEDT AVVYCARGYGVNIFP YWGGLTVYSS (SEQ ID NO:346)	ASTKGPSVPLAPSSKSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYICNVNHKPSNTKYOK KVEPKSCDKHTCTCPDAP ELGGPSVLEPKKHOTLM HRTPEVTCVVVDVSHEDPE VKRWYQGVGVHNAKT KPREEQYNSTRYVSILTV LHQDWLNGKEVCKNSNK ALPAPKEIKSKANGQPREP QVYLPPTPRDELTKNQVSL TCLVKGFPYSDIAVEWESN GDPENNYKTTTPYLDSDGS FFYISKLVDSKRWQDGN VFSCVVMHEALHNHYTQK SLSLPGK (SEQ ID NO:347)	DIVMTQTPLSLVTP GQPASISCRASEVD TYANSIMHWYLYQK PGQPPQLLYRASNL ESGVPRFSGSGSG TDFLTKISRVEADV GVYCCQQTNEPRPT FGGTLEIK (SEQ ID NO:348)	RTVAAPSVFIF PPSQQLKSG TASVGLCLNN FPREAKVQ WKVDNALQGS GNSQESVTEQ DSKDSYSLSS TLLSKADYER HKVYACEVTH QGLSPRVTKSF NRGEC (SEQ ID NO:349)

FIG. 10M

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr2 (imgt)	Heavy-chain cdr3 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
VSTB51	Human IgG1/kappa	Group 1	GFSSYT (SEQ ID NO:350)	ISNSGYT (SEQ ID NO:351)	ARDTVLSPFD Y (SEQ ID NO:352)	SSISY (SEQ ID NO:353)	DTS (SEQ ID NO:354)	HOBSST (SEQ ID NO:355)	EVQLVESGGGLVQPG GSLRLSCAASGFTFSY TMSWVRQAPGKLE WVATISNSGTYTMD SVKGRFTISRDNKNS LYQMNSLRAEDTAV YYCARDTULSPFDYW GGGTVTYVS (SEQ ID NO:356)	ASTKGPSVFPLAPSSKSTSG GTAAAGCLVKDYFPEPVV SWNSGALTSGVHTFPAVL QSSGLYSLSSVTPSSSLG TQTYCNVNHKPSNTKURK KVPKSCDKHTCCPPCPAP ELGGPSVFLPPPKRDITLM ISRTFVTCVVDVSDHDEPE VKRWYVDGVEVHNART KPREEQYNSTYRVVSULTV LHQDWLNGKEYKCKVSNK ALPAPKEIKSKANGQPREP QVYTPPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GDPENNYKTTTPVLDSGGS FEYSKLTVDKSRWQQGN VFCSGVHMEALHNHTQK SLSLPGK (SEQ ID NO:357)	EIVLTQSPQFQSVTP KEKVTITCSATSSISY MMWYQQKPKDQSP KLLWKTSELASGVPS PFGSGSDFTLT HSLAEQAATYTCM QRSEFTTSGGTKEI K (SEQ ID NO:358)	RTVAAPSVEIF PFSDEQLSG TASVYCLLN FYPREAKVQ WKVDNALQS GNSQSVTEQ DSKOSTYLSL TLLSKADYEK HKVYACEVTH QGLSPVTKSF NIRGEC (SEQ ID NO:359)
VSTB52	Human IgG1/kappa		GGTFSNWV (SEQ ID NO:360)	IVPGGGFT (SEQ ID NO:361)	ARYVRSDEY SMDF (SEQ ID NO:362)	QSLVSNKGT Y (SEQ ID NO:363)	LVS (SEQ ID NO:364)	VOATHFPQ T (SEQ ID NO:365)	QVQLVSGAEWKPG SSVSVSKASGGTFSN YMHGWVRQAPGQGL EWMEGIYPGGGFTHY NEKFKGRVITADEST STAYMELSLRSEDTA VYTCARYVRSDEYS MDFMGCGTLVTNVS (SEQ ID NO:366)	ASTKGPSVFPLAPSSKSTSG GTAAAGCLVKDYFPEPVV SWNSGALTSGVHTFPAVL QSSGLYSLSSVTPSSSLG TQTYCNVNHKPSNTKURK KVPKSCDKHTCCPPCPAP ELGGPSVFLPPPKRDITLM ISRTFVTCVVDVSDHDEPE VKRWYVDGVEVHNART KPREEQYNSTYRVVSULTV LHQDWLNGKEYKCKVSNK ALPAPKEIKSKANGQPREP QVYTPPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GDPENNYKTTTPVLDSGGS FEYSKLTVDKSRWQQGN VFCSGVHMEALHNHTQK SLSLPGK (SEQ ID NO:367)	DVWMTQSPPLSPVT LGQPASISCSQSLS LYSNGKTYLWVRFQ RPGQSPRLRLVSK LDSGVPDRFSGGS GTDFTLKSRVEAE VGYYTCVQATHFPQ TEGQGTKEIK (SEQ ID NO:368)	RTVAAPSVEIF PFSDEQLSG TASVYCLLN FYPREAKVQ WKVDNALQS GNSQSVTEQ DSKOSTYLSL TLLSKADYEK HKVYACEVTH QGLSPVTKSF NIRGEC (SEQ ID NO:369)

FIG. 10N

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr2 (imgt)	Heavy-chain cdr3 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
VSTB53 INX905	Human IgG1/kappa	Group 1	GYTHTY (SEQ ID NO:370)	IPSSGY (SEQ ID NO:371)	ARGAYDDY DYVANDY (SEQ ID NO:372)	QTVIISGN TY (SEQ ID NO:373)	KVS (SEQ ID NO:374)	FOAGIIPW T (SEQ ID NO:375)	QVQLVSGAEVKPG ASVWVSCAGSYTFTH YTIHWVRQAPGGLE WMGIIPSSGYSEYN QKFKDRVTMTDST STVYMELSLRSEDYA VYTCARGAYDDYDY YAMDVWGGQGLTVY SS (SEQ ID NO:376)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPVV SWNSGALTSGVHTFPAVL QSSGLYSLSVWTVPSSEIG TOTYICNVNHPKSTKDK KVEPKSCKHTCTCPDAP ELGGPSVLEPPPKRDITLM ISRTPEYTCVVDVSKEDPE VARNWYDGVVEVHNART KPREQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPERTISKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPSDIAVEWESN GQPNVNYKTPPDLDSDGS FLYSLKLVNKRSGRQGQGN VFESCVNHAEALHNHTQK SLSLSPCK (SEQ ID NO:377)	DIVMTQSPSLSPVTP GEPASISCRSSQTV HSNGNTYLEWYLQK PGQSPQLLYKNSNR FSGVPDRFSGSGG TDTLKRREAEDV GVYVCAQSNVFW NRGEC (SEQ ID NO:378)	RTVAAPSVEIF PPSEQLSSG TASVCLLIN FPFREAKVQ WKVDNALQS GNSQSVTEQ DSKOSTYLSL TTLTKADYEK HRVYALEVTH QGLSPVTKSF NRGEC (SEQ ID NO:389)
VSTB54 INX906	Human IgG1/kappa	Group 2	GVNKOY (SEQ ID NO:380)	IDPTHTGY (SEQ ID NO:381)	ARDRDPYW FLDV (SEQ ID NO:382)	ESVEYGTSL (SEQ ID NO:383)	DAF (SEQ ID NO:384)	QQSRKVP WT (SEQ ID NO:385)	QVQLVSGAEVKPG ASVWVSCAGSYNIID TYIMHWVRQAPGGQ LEWIMGRIDPTHTGYI YDPKIQGRVTMTDST STSTVYMELSLRSED TAVVYCARDRDPYW FLOWVGGQGLTVYSS (SEQ ID NO:386)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPVV SWNSGALTSGVHTFPAVL QSSGLYSLSVWTVPSSEIG TOTYICNVNHPKSTKDK KVEPKSCKHTCTCPDAP ELGGPSVLEPPPKRDITLM ISRTPEYTCVVDVSKEDPE VARNWYDGVVEVHNART KPREQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPERTISKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPSDIAVEWESN GQPNVNYKTPPDLDSDGS FLYSLKLVNKRSGRQGQGN VFESCVNHAEALHNHTQK SLSLSPCK (SEQ ID NO:387)	DIVMTQSPSLSPVTP GQPASISCRASEIVE YYGTSUMQWYLOK PGQSPQLLYDAFN VESGVPDRFSGSGS GTDFTLISRVEAED GVVYVCAQSNVFW WTFGGTKLEIK (SEQ ID NO:388)	RTVAAPSVEIF PPSEQLSSG TASVCLLIN FPFREAKVQ WKVDNALQS GNSQSVTEQ DSKOSTYLSL TTLTKADYEK HRVYALEVTH QGLSPVTKSF NRGEC (SEQ ID NO:389)

FIG. 100

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (imgt)	Heavy-chain cd2 (imgt)	Heavy-chain cd3 (imgt)	Light-chain cd1 (imgt)	Light-chain cd2 (imgt)	Light-chain cd3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB55	Human IgG1/kappa		GYIASDWW (SEQ ID NO:390)	ISVSGST (SEQ ID NO:391)	ARITTVPTG SYGVDP (SEQ ID NO:392)	SSVNF (SEQ ID NO:393)	DYS (SEQ ID NO:394)	QIWSNPP T (SEQ ID NO:395)	QVQLQESGPGLVKPS ETLSITCAVSGYSIASD YVNWIRQPKGKL EWIGWISGTSNNP SINSRVTSVDSNNQ ESLKSSTVARDTAVY YCARITTVPTG VDPHGGTITVYS (SEQ ID NO:396)	ASTKGPSVFPLAPSSSTSG GTAALGCLVADYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYKCNVNHKPSNTVDK KVPEASCDTHCTCPDAP ELLGSPSVLEPPHPADTLM ISRTPEVTCVVDVSHEDPE VKRWYVDGVEVHNKT KPREQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPKEITSKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEVESN GQPENNYKTPPVLDSDGS FELYSKLVDSKRVQDGN VFCSVNMHEALHNHTQK SLSLSPGK (SEQ ID NO:397)	EIVLTQSPDFQSVTP KERVTITCGSSSVN FMWYQQKPDQSP KLIHQTSLNASGWP SRFSGSGTDFTLI NLSLEADAATYTCQ QWSNHPPTFGGT KLEIK (SEQ ID NO:398)	RTVAAPSVEIF PPSEQLSG TASVCLLN FYPREARVQ WKVDNALQS GNSQESVTEQ DSKDSYLSL TLLSKADYEK HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:399)
V5TB56 INF501	Human IgG1/kappa	Group 2	GYFTTSW (SEQ ID NO:400)	IIPNLTHT (SEQ ID NO:401)	ARLDGDYD ALDY (SEQ ID NO:402)	ESVEYGTGF (SEQ ID NO:403)	TAS (SEQ ID NO:404)	QDSRVPT T (SEQ ID NO:405)	QVQLVDSGAEVKNRG ASVYVSCAGSYFTTS YMLHWVRQAPGG LEWNGYIIPNLTHTD YNQKFKRVITMRD TSTSTYIMELSLRSE DTAVYTCARLDGDYD YALDYWGQGLTVYS S (SEQ ID NO:406)	ASTKGPSVFPLAPSSSTSG GTAALGCLVADYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYKCNVNHKPSNTVDK KVPEASCDTHCTCPDAP ELLGSPSVLEPPHPADTLM ISRTPEVTCVVDVSHEDPE VKRWYVDGVEVHNKT KPREQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPKEITSKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEVESN GQPENNYKTPPVLDSDGS FELYSKLVDSKRVQDGN VFCSVNMHEALHNHTQK SLSLSPGK (SEQ ID NO:407)	DIVMTQTPLSLVTP GQPASISCRASESVE YGTSMQWYVTLQK PGQPPQLVYFASNV ESGVPDRFSGSGG TDTLKSRVEADV GVYTCQSRKVPYT FGGGTLEIK (SEQ ID NO:408)	RTVAAPSVEIF PPSEQLSG TASVCLLN FYPREARVQ WKVDNALQS GNSQESVTEQ DSKDSYLSL TLLSKADYEK HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:409)

FIG. 10P

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (imgt)	Heavy-chain cd2 (imgt)	Heavy-chain cd3 (imgt)	Light-chain cd1 (imgt)	Light-chain cd2 (imgt)	Light-chain cd3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB57	Human IgG1/kappa		GFSTYA (SEQ ID NO:410)	ISSGSDT (SEQ ID NO:411)	ARPTYGFS YFDY (SEQ ID NO:412)	SSVSY (SEQ ID NO:413)	STS (SEQ ID NO:414)	HQWRYPT (SEQ ID NO:415)	EVQLVESGGGLVQPG GSLRISCAASGFTFTSY AMSWVRQAPGKGL WYATISSGSGSDTYP DTVKGRTISRDAK NSLVLQMSLRAEDT AVYYCARPTYGGFSY FDYWGSGTLTVYSS (SEQ ID NO:416)	ASTKGPSVFPLAPSSSSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QTQYICNVNHRPSTKVDK KVEPKCKDTHCTCPDAP ELGGPSVLEPPPKDKTLIM ISRTPYTCVVVDVSHEDPE VKFNWYVGQEVHNNAKT KPREEQYNSTYRVSVLT LHODWLNKGEVKCVSNK ALPAPIETSKANGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GDPENNYKTTTPPLDSGGS FLYSKLTVDKSRWQDGN VFSCSVMHAEALHNHTQK SLSLPGK (SEQ ID NO:417)	DIQLTQSPFSLASV GDRVITTCSSASSVS YMHWYQKPKGKA PKLWYSTNLASGVP SRFSGSGSGTEFTLT SLIQPDIFATYCI QWRTYPTGEGTKL NRGEC (SEQ ID NO:418)	RTVAAPSVEIF PPSDQLLGG TASVVCCLNN FYPREAKVQ WKVDNALQS GNSQSVTEQ DSKDSYSLSS TTLTSKADYEK HKVYACEVTH QGLSPRVTSF NRGEC (SEQ ID NO:419)
V5TB58	Human IgG1/kappa		GFSLT NYG (SEQ ID NO:420)	IWRGG NT (SEQ ID NO:421)	ARSMV SYTYDY (SEQ ID NO:422)	SSVSY (SEQ ID NO:423)	DTS (SEQ ID NO:424)	QQWS SYPT (SEQ ID NO:425)	QVQLQESGPGLVKPS ETLSLTCTVSGFSLTNY GVHWIRDPGPKGLE WIGWIRGNGTDYN AAFMKSVTISVDTSK NQPSLKSIVTAADTA VYYCARSMVSYTYDY WGQGLTVYSS (SEQ ID NO:426)	EIVLTQSPDFQSITP KENVITTCSSASSVS MHWYQKPKQSP KLLIKDTSNLASGVP SRFSGSGSGTDFTLT NSLEAEADATYYCQ QWSSYPPTFGQTK LEIK (SEQ ID NO:427)	EIVLTQSPDFQSITP KENVITTCSSASSVS MHWYQKPKQSP KLLIKDTSNLASGVP SRFSGSGSGTDFTLT NSLEAEADATYYCQ QWSSYPPTFGQTK LEIK (SEQ ID NO:428)	RTVAAPSVEIF PPSDQLLGG TASVVCCLNN FYPREAKVQ WKVDNALQS GNSQSVTEQ DSKDSYSLSS TTLTSKADYEK HKVYACEVTH QGLSPRVTSF NRGEC (SEQ ID NO:429)

FIG. 10Q

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr2 (imgt)	Heavy-chain cdr3 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
VSTB59	Human IgG1/kappa	Group 1	GYTFDWW (SEQ ID NO:430)	HETSLNP (SEQ ID NO:431)	ARWGYGNP WFAY (SEQ ID NO:432)	ESVDYVNSF (SEQ ID NO:433)	RAS (SEQ ID NO:434)	QDSNCPY (SEQ ID NO:435)	QVQLVDSGAEVKKPG ASVKYSCASQYTFD YMMHWVRQAPGQ GLEWMAIGETSLNP SYHQKFKGRVTMTD TSSTYYMELSLUSE DTAVTYCARWGVGN PWFAVWGRGLTVV SS (SEQ ID NO:436)	ASTKGPSVPLAPSSISTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYKNVNHKPSNTKVK KVEPKSCDTHCTCPDAP ELLGPPSVLEPPPKDTLM KPRREQYNSTYRVVSULTV LHQDWLNGKEYKCKVSNK ALPAPKEPTISKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPENNYKTTTPPLVDSGS FFLYSKLTVDKSRWQQGN VFCSSVMHEALHNHYTQK SLSLPCK (SEQ ID NO:437)	DIVMTQTPLSLVTP GQPASISCRASESD SYANSFVHWYLOQP QGPQLLYRASNL SGVPDRFSGSGST DFTLKLRVEAEVIG VYVYCCQSNEDPTTF QGQTKLEIK (SEQ ID NO:438)	RTVAAPSVEIF PFSEQLKSG TASVYCLLN FYPREAKVQ WKVDNALQS GNSQSVTEQ DSKDSYLSL TTLTKADYEK HKVYACEVTH QGLSPRVTKSF NRGEC (SEQ ID NO:439)
VSTB60 Group 2	Human IgG1/kappa	NLTLDLGL and VQTGNDAP SNC Group 2	GYTFTNIG (SEQ ID NO:440)	INTYGES (SEQ ID NO:441)	ARDYGYWS AY (SEQ ID NO:442)	ESVDNYANS F (SEQ ID NO:443)	RAS (SEQ ID NO:444)	QDSHEDPY T (SEQ ID NO:445)	QVQLVDSGSELKPKG ASVKYSCASQYTFN YGMTWVRQAPGQ LEWNGWINTYTGES TYADDRKGRFYFSLD SVSTAYLQICSLAEDT AVYYCARDYGYGWSA YWGQGLTVWS (SEQ ID NO:446)	ASTKGPSVPLAPSSISTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYKNVNHKPSNTKVK KVEPKSCDTHCTCPDAP ELLGPPSVLEPPPKDTLM KPRREQYNSTYRVVSULTV LHQDWLNGKEYKCKVSNK ALPAPKEPTISKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPENNYKTTTPPLVDSGS FFLYSKLTVDKSRWQQGN VFCSSVMHEALHNHYTQK SLSLPCK (SEQ ID NO:447)	DIVMTQTPLSLVTP GQPASISCRASESD NYANSFMHWYLOK PGQSPQLLYRASNL ESGVPRFSGSGSG TDFTLKISRVEADV GVYVCCQSHEDPYT FGQGTKLEIK (SEQ ID NO:448)	RTVAAPSVEIF PFSEQLKSG TASVYCLLN FYPREAKVQ WKVDNALQS GNSQSVTEQ DSKDSYLSL TTLTKADYEK HKVYACEVTH QGLSPRVTKSF NRGEC (SEQ ID NO:449)

FIG. 10R

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr2 (imgt)	Heavy-chain cdr3 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB61	Human IgG1/kappa		GYFTSHW (SEQ ID NO:450)	INPRGRT (SEQ ID NO:451)	ARGDFYGD YFWYFDV (SEQ ID NO:452)	QNVHGA (SEQ ID NO:453)	MAS (SEQ ID NO:454)	LQWVWLT (SEQ ID NO:455)	QQLVDSGAENVKPG ASVNVSKASGYFTTS HMMHWVRQAPGQ GLEWNGEINPRDGR TNYNEKTRVMTNR DTSTVYMELSLRS EDTAVTCARQDPHY GDYFWYFDVWVGQGT LVTVSS (SEQ ID NO:456)	ASTKGPSVPLAPSSSTSG GTAALGCLVDVFPFVTV SWNSGALTSQVHTFPAVL QSSGLYSLSVTVPSLSIG TQTYCNVWHPSTNVOK KVPKSCDHTCTCPDAP ELGGPSVLPFPPKPDITLM ISRTPEVTCVWDVSHEDPE VKFNWYDGVGVHNAKT KPREEQYNSTRVVSULTV LHQDWLNGKEYKCKVSNK ALPAPIETKSKANGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQDENNNWTTTPVLQSDGS FHYSLTKLTDKSRWQQGN VFCSVMHEALHNHTQK SLSLSPGK (SEQ ID NO:457)	DQMTQSPSLSAS VGDRTVITCKASQN VHGAVAWYQQK GNKPKLNNMASNR PTGUPRFESGSG TDTLTISLQPEDV ATYTCLOHWNYLTF GGGTGLEIK (SEQ ID NO:458)	RTVAAPSVEIF PPSDRELKSG TASVVCCLNN FYPREAKVQ WKDVALQS GNSQSVTEQ DSKSTYSLS TTLTKADYEK HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:459)
V5TB62	Human IgG1/kappa		GYFTTHW (SEQ ID NO:460)	YVPGGDT (SEQ ID NO:461)	ARRDYDGD Y (SEQ ID NO:462)	SSVSH (SEQ ID NO:463)	LTS (SEQ ID NO:464)	QQVQYPP Y (SEQ ID NO:465)	QQLVDSGAENVKPG ASVNVSKASGYFTTH YWIQWVRQAPGQGL EWMMGAYFPDGDTR YVQKFGRTVMTNR STSTVYMELSLRSED TAVTYCARRDYDGD YWGQGTIVTVSS (SEQ ID NO:466)	ASTKGPSVPLAPSSSTSG GTAALGCLVDVFPFVTV SWNSGALTSQVHTFPAVL QSSGLYSLSVTVPSLSIG TQTYCNVWHPSTNVOK KVPKSCDHTCTCPDAP ELGGPSVLPFPPKPDITLM ISRTPEVTCVWDVSHEDPE VKFNWYDGVGVHNAKT KPREEQYNSTRVVSULTV LHQDWLNGKEYKCKVSNK ALPAPIETKSKANGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQDENNNWTTTPVLQSDGS FHYSLTKLTDKSRWQQGN VFCSVMHEALHNHTQK SLSLSPGK (SEQ ID NO:467)	EIVLTQSPDFQSVTP KENVTITCSASSVS HMMWYQKPDQS PKLMLTSLNLSGVP SRFSGSGSDTFLTI NSLEAEADAITYYQ QVQTYPTFGQTR LEIK (SEQ ID NO:468)	RTVAAPSVEIF PPSDRELKSG TASVVCCLNN FYPREAKVQ WKDVALQS GNSQSVTEQ DSKSTYSLS TTLTKADYEK HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:469)

FIG. 10S

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (imgt)	Heavy-chain cd2 (imgt)	Heavy-chain cd3 (imgt)	Light-chain cd1 (imgt)	Light-chain cd2 (imgt)	Light-chain cd3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
			Heavy-chain cd1 (imgt)	Heavy-chain cd2 (imgt)	Heavy-chain cd3 (imgt)	Light-chain cd1 (imgt)	Light-chain cd2 (imgt)	Light-chain cd3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB3 INX902	Human IgG1/kappa	Group 2	GFSITSDEFA (SEQ ID NO:470)	ITYSGFT (SEQ ID NO:471)	ARQYGNV WYFDV (SEQ ID NO:472)	ESVEYGTSL (SEQ ID NO:473)	AAS (SEQ ID NO:474)	QDSKVP WT (SEQ ID NO:475)	QVQLQESGPGLVWPS ETLSITCAVSGFSTSD FAWNWRQPPGKGL EWIGITYSGFTNYP SLESLVTSVDSKHNQ FSLKSLSYTAAQTAVY YCARQETGHWYWF DYWGQGLTVYSS (SEQ ID NO:476)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSSVTVPSSSLG TQTYKCNVNHKPSNTKVDK KVPKSCDKHTCPCPADAP ELGGGPSVFLPPKPKDTOLM ISRTEPCVVDVDSHPDE VKRWYVDGVEVHNKAT KPREQYNSTYRVSVSLTV LHQDWLNGKEYKQCVSNK ALPAPIETKSKAGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPENNYKYTEPPMLDSDGS FELYSKLTVDKSRHQQGN VFCSVMHMEALHNHYTQK SLSLSPGK (SEQ ID NO:477)	DIVMTQTPLSLSVTP GQPASISCRASESVE VYGTSLQWYQNP GQPPQLLYAASNV ESGVPDRFESGSG TDFTLISRVEAEDEV GVYTCQSSKRPVW TFGGQTLKLEIK (SEQ ID NO:478)	RTVAAPSVEIF PPSDQLKSSG TASVYCLINN FYPREARVQ WKVDNALQ GNSQESVTEQ DSKDSYSLSS TLLSKADYER HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:479)
V5TB4	Human IgG1/kappa		GYSITSGYF (SEQ ID NO:480)	MGYDGRI (SEQ ID NO:481)	AREGDYGS GFAYW (SEQ ID NO:482)	QNVNTN (SEQ ID NO:483)	SAS (SEQ ID NO:484)	QQYNVPL T (SEQ ID NO:485)	QVQLQESGPGLVWPS ETLSITCAVSGYTSISG YFVNWNRQPPGKGL EWIGIMYGDGRIFYS PSLKNRVTSVDSKHNQ QFELSKLSVTAADTAIV YFCAREGDYGSGFA YWGQGLTVYSS (SEQ ID NO:486)	DIQMTQSPFSLAS VGDRVITTCASQ VNTNLAWYQQKPG KVPKLLYSASYRYS GVPSRFSGSGSGTD FTLTSLQPEDVATY YCCQQYNWYPLTFGQ GTLEIK (SEQ ID NO:488)	RTVAAPSVEIF PPSDQLKSSG TASVYCLINN FYPREARVQ WKVDNALQ GNSQESVTEQ DSKDSYSLSS TLLSKADYER HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:489)	

FIG. 10T

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdrl1 (imgt)	Heavy-chain cdr2 (imgt)	Heavy-chain cdrl2 (imgt)	Light-chain cdrl1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdrl3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB65	Human IgG1/kappa	Group 1	GYFTSYW (SEQ ID NO:490)	INPSNGLT (SEQ ID NO:491)	ARSTYDGD YVAMDY (SEQ ID NO:492)	QSVILNGN TY (SEQ ID NO:493)	IKVS (SEQ ID NO:494)	FQASINPW (SEQ ID NO:495)	QVQLVQSGAEVKKPG ASVYKSCASGYFTS YVHWWRQAPGGGL EWMEINPISNGLTY NEKFRIVMTTRDS TSVYPMELSLRSEDY AVTYCARSDYDGDY YAMDYWGQGLTVV SS (SEQ ID NO:496)	ASTKGPSVFPLAPSSKSTSG GTAALGLVQDYPPFVTV SWNSGALTGVHTFPAVL QSSGIYSLSVTVPSLSLG TQTYKCNVNHKPSNTKVDK KVEPASCNHTCTCPDAP ELLGPSVFLPRPRVDTLIM ISRTPEYTCVVDVDSHEDPE VKRWYVDGVEVHNHAKT KPREQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPIERTSKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEVEN GQPNKYTPPKLPDSDGS FELYSKLTVDSKSRVQDGN VFCSSVNHAEALHNHTQK SLSLPGK (SEQ ID NO:497)	DIVMTQSPSLPVP GEPASISCSSTQSV HSNGNTYLEWYDQK PGQSPQLLVKYSNR FSGVPDRFSGSGSG TQFTLISRVEAEADW GVYTCQASHPVW TFGGQTKLEIK (SEQ ID NO:498)	RTVAAPSVEIF PPSDQLSG TASYVCLNN FPREARVQ WKVDNALQS GNSQESVTEQ DSKOSTYLSL TTLTKADYEK HKVYACEVTH QGLSPVITSF NRGEC (SEQ ID NO:499)
V5TB66 INX507	Human IgG1/kappa	Group 2	GYPFTGYF (SEQ ID NO:500)	INPYNGGT (SEQ ID NO:501)	ARWTFDGLF MDY (SEQ ID NO:502)	ENVOKYGSF (SEQ ID NO:503)	ATS (SEQ ID NO:504)	QQSKEDPY T (SEQ ID NO:505)	QVQLVQSGAEVKKPG ASVYKSCASGYFTG YFHWWRQAPGQG LEWNGRINPYNGGT VYVQNFNDRYMTMR DTSYSTVYMELSLRS EDTAMTYCARMTEDG LFMDYWGQGLTVV SS (SEQ ID NO:506)	ASTKGPSVFPLAPSSKSTSG GTAALGLVQDYPPFVTV SWNSGALTGVHTFPAVL QSSGIYSLSVTVPSLSLG TQTYKCNVNHKPSNTKVDK KVEPASCNHTCTCPDAP ELLGPSVFLPRPRVDTLIM ISRTPEYTCVVDVDSHEDPE VKRWYVDGVEVHNHAKT KPREQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPIERTSKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEVEN GQPNKYTPPKLPDSDGS FELYSKLTVDSKSRVQDGN VFCSSVNHAEALHNHTQK SLSLPGK (SEQ ID NO:507)	DIVMTQSPSLPVP LGQPASISCSASENV DIYGISFANWTFQQ RPGQSPRLRYATSN QSGVPDRFSGSGS GTDFTLISRVEAEAD VGYYTCQSKEDPY TFGGQTKLEIK (SEQ ID NO:508)	RTVAAPSVEIF PPSDQLSG TASYVCLNN FPREARVQ WKVDNALQS GNSQESVTEQ DSKOSTYLSL TTLTKADYEK HKVYACEVTH QGLSPVITSF NRGEC (SEQ ID NO:509)

FIG. 10U

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (imgt)	Heavy-chain cd2 (imgt)	Heavy-chain cd3 (imgt)	Light-chain cd1 (imgt)	Light-chain cd2 (imgt)	Light-chain cd3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB67 INX909	Human IgG1/kappa	Group 1	DYFSSYW (SEQ ID NO:510)	IPFGSGGT (SEQ ID NO:511)	ARAYDYD MYFDS (SEQ ID NO:512)	QDISSV (SEQ ID NO:513)	YTS (SEQ ID NO:514)	QIWNTP WT (SEQ ID NO:515)	QVQLVQSGAEVKKPG ASVSVSCASDYFSS YNIQWVRQAPGQGL EWMGEIPFGSGTNY NEKFGRTMTSDTS TSTVMESSLSSEDT AVYFCARAYDYDYM S YFDSWGGGTYYVS (SEQ ID NO:516)	ASTKGPSVFLAPFSSSTSG GTAALGCLUKDYFPEPVV SWNSGALTSQVHTFPAVL QSSGLVLSVWYVPSLSL TQTYCNVNHKPSNTKQK NYEPASCDTHTCTCPDAP ELGGPSVLPKPKKDTLIM ISRTPEVTCVVDVDSHEDPE VKFNWYDGVGVHNAKT KPREQYNSTYRVSVSLTV LHQDWLNGKEYKCKVSNK ALPAPKEITISKAKGQPREP QVYLPFPFSDIAVEWESN TCLVIGFYPFSDIAVEWESN GQDENNYMTTPPRLDSGS FLYSKLTVDKSRWQQGN VPSCSVMHEALHNHTQK SLSLPGK (SEQ ID NO:517)	DIQMTQSPSLSAS VGDRTITTCRAQDI SSYLNIWYQKPKG VPKLLIYTSRLSG VPSRFSGSGSDFT LTSLQPEDVAITY CQHVNLPWTGQ GTLEIK (SEQ ID NO:518)	RTVAAPSVEIF PFSDEQLSGT ASVCLLNIFY PREAKVQWK VDNALQSGNS QESYVEQDSK DSTYLSLTLL SKADYERHKV YACEVTHQGL GGPYTKCFHRG EC (SEQ ID NO:519)
V5TB68	Human IgG2/kappa		GYTFDYT (SEQ ID NO:520)	INPYNGG T (SEQ ID NO:521)	ARHYGNYN WYFDV (SEQ ID NO:522)	QVWNTA (SEQ ID NO:523)	SAS (SEQ ID NO:524)	QQHFTPI T (SEQ ID NO:525)	QVQLVQSGAEVKKPG ASVSVSCASGYTFD YIMMWVRQAPGQRL EWMGLINPYNGGT YHQQFGRTVITSDTS ASTATVMESSLSSEDT AVYFCARHYGNYNW YFDVNGCGGTYYVS (SEQ ID NO:526)	ASTKGPSVFLAPFSSSTSG GTAALGCLUKDYFPEPVV SWNSGALTSQVHTFPAVL QSSGLVLSVWYVPSLSL TQTYCNVNHKPSNTKQK NYEPASCDTHTCTCPDAP ELGGPSVLPKPKKDTLIM ISRTPEVTCVVDVDSHEDPE VKFNWYDGVGVHNAKT KPREQYNSTYRVSVSLTV LHQDWLNGKEYKCKVSNK ALPAPKEITISKAKGQPREP QVYLPFPFSDIAVEWESN TCLVIGFYPFSDIAVEWESN GQDENNYMTTPPRLDSGS FLYSKLTVDKSRWQQGN VPSCSVMHEALHNHTQK SLSLPGK (SEQ ID NO:527)	DIQLTQSPSLSASV GDRVITTCASQYV NTAVAWYQQKPGK APKLLISASRYVTG VPSRFSGSGSTEFT LTSLQPEDFAITYC QQHFTTPTTGQGT KLEIK (SEQ ID NO:528)	RTVAAPSVEIF PFSDEQLSG TASVCLLN FYPREAKVQ WVDNALQS GNSQSVTEQ DSKOSTYLSL TLLSKADYER HNYVACEVTH QGLSPRVTSF NIRGEC (SEQ ID NO:529)

FIG. 10V

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr2 (imgt)	Heavy-chain cdr3 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB69	Human IgG1/kappa		GYTFIN G (SEQ ID NO:530)	INTYGE P (SEQ ID NO:531)	ARNYGNV AV (SEQ ID NO:532)	QDINSY Y (SEQ ID NO:533)	RAN (SEQ ID NO:534)	LQYDEFL T (SEQ ID NO:535)	QVQLVQSGSELKPKG ASVYKSCASGYTFIN YGMNWRVQAPGQG LEWNGWINTYGE TYADDFGRVFSIDT SVSTAYLQCSKREDT AVTTCARNGYVAT WGQGTIVYSS (SEQ ID NO:536)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPVV SWNSGALTSGVHTFPAVL QSGGLYSLSVTVPSSELG TQTYICNVNHKPSNTKVDK KVEPKSCDTHCTCPDAP ELGGPSVFLPPKRDITLM ISRTPETCVVDVSHEDPE VKPNWYDGVVEVHNKT KPREEQYNSTYRVVSVLT LHQQDWLNGKEYKKVSNK ALPAPIETISKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GOPENNHYTTTPPLDSGS FRYSKLTVDKSNWQQGN VFCSSVWHEALHNHTYQK SLSLPKK (SEQ ID NO:537)	DIQMTQSPSSLSAS VGDRVITTCASQDI NSYLSWFEQKPKG APKSLINBARLVDG VPSRFSGSGSDFT LTLSLQPEDPATYLC LQYDEFLTQCGT RLEIK (SEQ ID NO:538)	RTVAAPSVER PFSDEQLSG TASVCLLN FYPREKVV WKYNALQS GNSQSVTEQ DSKSTYLS TLTSKADYEK HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:539)
V5TB70	Human IgG1/kappa	Group 1	GYTFSNW (SEQ ID NO:540)	ILPGSGNV (SEQ ID NO:541)	ATPPHYGY DYVDVNY (SEQ ID NO:542)	QSLDSDGKT Y (SEQ ID NO:543)	LVS (SEQ ID NO:544)	WQGTFFP QT (SEQ ID NO:545)	EVQLVQSGAEVKRPG ATYKISKCNVGYTFIN YVIEWYQQAQPKGL EWMGELPGSGNVN YNEKGRVITTAQTS TDYAVNELLSDREDT AVTTCATPPHYGYD YVDVWYWGQGLT VSS (SEQ ID NO:546)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPVV SWNSGALTSGVHTFPAVL QSGGLYSLSVTVPSSELG TQTYICNVNHKPSNTKVDK KVEPKSCDTHCTCPDAP ELGGPSVFLPPKRDITLM ISRTPETCVVDVSHEDPE VKPNWYDGVVEVHNKT KPREEQYNSTYRVVSVLT LHQQDWLNGKEYKKVSNK ALPAPIETISKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GOPENNHYTTTPPLDSGS FRYSKLTVDKSNWQQGN VFCSSVWHEALHNHTYQK SLSLPKK (SEQ ID NO:547)	DVVMTCSPSLPVT LGQPAISICSSQSL LDSGKTYINWFQ QRPQSPRRILVVS ELDSGVPDRFSGG SGTDFTLKIRVEAE DVGYYCQQTTHF PQTPGQGTREIK (SEQ ID NO:548)	RTVAAPSVER PFSDEQLSG TASVCLLN FYPREKVV WKYNALQS GNSQSVTEQ DSKSTYLS TLTSKADYEK HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:549)

FIG. 10W

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr2 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant	
V5TB71	Human IgG1/kappa		GYVESBSW (SEQ ID NO:590)	IVPDGDDT (SEQ ID NO:591)	ABRWEL (SEQ ID NO:592)	QSLNSGDQ NSY (SEQ ID NO:593)	GAS (SEQ ID NO:594)	QNDHSPY T (SEQ ID NO:595)	QVQLVQSGAEVKNPG SSVYVSCAKGCVFSR SWINWVRQAPGQGL EWNGRYPGDDTN YNGKFKGRVTTADES TSYAMLSLSSEDT AVYVCARRWFLWGG GTLVYSS (SEQ ID NO:596)	ASTKGPSVFPLAASSSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPPSSSLG TQTYCNVNHKPSNTKVK KVEPKSCDKHTCTCPDAP ELGGPSVFLPPPKKDTLM ISRTPVTCVVVDVSHEDPE VKRWYVDGVEVHNART KPREEQYNSTYRVSVLT LHQDWLNGKEYKCKVSNK ALPAPKEISKANGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPSPDIAVEWESN GDPENNYKTTTPPLDSGGS FKYSKLTUOKSLRWQGN VFCSVMHEALHNHTYCK SLSLPGK (SEQ ID NO:597)	DIVMTQSPDLSAVS LGERATINCSQSL LNSGDKQSYLAWY QQKPGQPKLLYIG ASTRESQVPDRFSGS GGSTDTLTLSLQA EDVAVPYCNDHST PLTGGGRTLEIK (SEQ ID NO:598)	RTVAAPSVEIF PPSDEQLSG TASVVCCLNN FYFREAKVQ WKVDNALQS GNSQESVTEQ DSKOSTYSLS TLLSKADYEK HKVYACEVTH QGLSPVYNSF NRGEC (SEQ ID NO:599)
V5TB72	Human IgG1/kappa		GFTSSVA (SEQ ID NO:560)	ISGGGSHT (SEQ ID NO:561)	ARRGNLDG PY (SEQ ID NO:562)	SSVSH (SEQ ID NO:563)	DTS (SEQ ID NO:564)	QQWNFPY FT (SEQ ID NO:565)	EVQLVESGGGLVQPG GSLRLCAASGFTFSY AMSWVRQAPGKGL WVAEISGGSHYTP DTYTGFTISRDAK NSLYLQMNLSAEDT AVYVCARRGNLDGP YNGGDTLVYSS (SEQ ID NO:566)	EIVLTQSPATLSLSPG ERATLSCASSSVSH MYWYQQKPGQAP RLIYDTSKASGIPA RFSGSGSGTDFTLTIS SLPEDFAVYTCQQL WVNFYPTFGGTKL EIK (SEQ ID NO:568)		RTVAAPSVEIF PPSDEQLSG TASVVCCLNN FYFREAKVQ WKVDNALQS GNSQESVTEQ DSKOSTYSLS TLLSKADYEK HKVYACEVTH QGLSPVYNSF NRGEC (SEQ ID NO:569)

FIG. 10X

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Light-chain cdr1 (imgt)	Heavy-chain cdra2 (imgt)	Light-chain cdra2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant	
V57B73 INX910	Human IgG1/kappa	Group 2	GYFTDYV (SEQ ID NO:570)	SSINY (SEQ ID NO:573)	ARVLVSVID Y (SEQ ID NO:572)	DTS (SEQ ID NO:574)	IIQDSYPW T (SEQ ID NO:575)	QVQLVQSGAEVKPG ASVYVSCASGYFTD YVSWVRQAPGGGLE WMGEVPGSGNTYY EKFKGRVMTITDST STYMEELSRSEDTA VYFCARLUUSMDY WGQGLTVYSS (SEQ ID NO:576)	ASTKGPSVFPLAPSSISSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVWVPSSSLG TQTYCNVNHKPSNTVOK KVEPKSCDTHCTCPCPAP ELLGPSVFLPPPKADTLIM ISRTPEVTCVVVDVSHEDPE VKRWYVDGVEVHNART KPREEQYNSTYRVVSULTV LHQDWLNGKEYKCKVSNK ALPAPKEIKTSKANKGQHP QVYLTPPSDELTKNQSL TCLVKGFPYSDIAVEWESN GQPNENYKTTTPPLDSGGS FFYSKLVTKSRWQOGN VFCSCVMHEALHNHTYQK SLSLPGR (SEQ ID NO:577)	EIVLTQSPDFQSVTP KERVITTCASSINYY ITWYQQKPKDQSPRL LMDTSKLASGVPSR FSGSGSTDTFTLTIN SLEAEDAATYYCHQ RSTFPWTFQGTSLR EIK (SEQ ID NO:578)	RTVAAPSVEIF PPSDQLKSG TASVCLINN FPYREAKVQ WKVDNALQS GNSQESVTEQ DSKDSYSSLS TTLTKADYER HKVYACEVTH QGLSPSVTKSF NRGEC (SEQ ID NO:579)	
V57B74	Human IgG1/kappa Group 4	Group 4	GYFTDYV (SEQ ID NO:580)	INPKYST (SEQ ID NO:581)	AADGSSAM DY (SEQ ID NO:582)	QSLNSGHQ KNY (SEQ ID NO:583)	GAS (SEQ ID NO:584)	QNDHRYPL T (SEQ ID NO:585)	QIMQLVQSGFEVKKP GTSVAVSCASGYIFT DYNDWVRQARGQR LEWIGDNPYDSTRY NQKFGVITRDMSS TSTAYMEELSRSEDT AVYYCAADGSSAM YMGQGTTVYSS (SEQ ID NO:586)	DIVMTQSPDSLAVS LGERATINCKSSQSL LNSGHQKRLAWY QKPKGPPKLLIYG ASTREGVDPDFSGS HKVYACEVTH QGLSPSVTKSF NRGEC (SEQ ID NO:589)	YALTFGQGTLEIK (SEQ ID NO:590)	RTVAAPSVEIF PPSDQLKSG TASVCLINN FPYREAKVQ WKVDNALQS GNSQESVTEQ DSKDSYSSLS TTLTKADYER HKVYACEVTH QGLSPSVTKSF NRGEC (SEQ ID NO:591)

FIG. 10Y

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdrl1 (imgt)	Heavy-chain cdr2 (imgt)	Light-chain cdrl1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant	
V5TB75	Human IgG1/kappa		GFNIKDYV (SEQ ID NO:590)	IDPENGNT (SEQ ID NO:591)	ARDYGFDFW (SEQ ID NO:592)	SSVY (SEQ ID NO:593)	STS (SEQ ID NO:594)	QQRSSPH T (SEQ ID NO:595)	QVQLVQSGAEVKKPG SSVYKSCASGFNIKD YHWVRQAPGGGLE WIMGWIDFENGNT DPKFGQRTTADST STAYWELSLRSED VYTCARDYGVFW GGGLTVTS (SEQ ID NO:596)	ASTKGPSVFPLAPSSKSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYICNVNHHKPSNTVK KVEPKSCDTHCTCPAP ELLGPPSVFLPPKPKDTLM ISRTPEVTCVVDVSHEDPE VKRWYVDGVVEVHNKAT KPREEQYNSTRVSVLT LHQDWLNGKEYKCKVSNK ALPAPERTSKANGQPREP QVYTLPPSRDELTKNQVSL TCLVGFPSDIAVEWESN GQFENNYKTTTPPLDSGS FFYSLKLVOKSRWQDGN VFCSVNHEALHNHYTQK SLSLPGK (SEQ ID NO:597)	DVYMTQSPAFLSVT PGRKVTTCISGSSV IYMWYQQKPDQA PKLLNSTINLASGVP SRFSGSGSDTFTT ISLEAEQAATYTCQ QRSYPTFGGQTK LEIK (SEQ ID NO:598)	RTVAAPSVEIF PPSEQLKSG TASVQCLLN FYPREKVV WKVDNALDS GNSQESVTEQ DSKDSYLSLS TLLSKADYEK HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:599)
V5TB76 INX911	Human IgG1/kappa	Group 2	GYTFTDWW (SEQ ID NO:600)	YPSHSYV (SEQ ID NO:601)	ARGGYRVP YAMDY (SEQ ID NO:602)	ENIYGA (SEQ ID NO:603)	GAT (SEQ ID NO:604)	QNVLSPTT (SEQ ID NO:605)	QVQLVQSGAEVKKPG ASVYKSCASGYFTD YHWVRQAPGGGL EWIMGNIPSHSYTY NQEFRDVTMTSDTS TSTVYMELSRSED AVYYCARGGYRVPY ANDYWGSGTTVYTS S (SEQ ID NO:606)	ASTKGPSVFPLAPSSKSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYICNVNHHKPSNTVK KVEPKSCDTHCTCPAP ELLGPPSVFLPPKPKDTLM ISRTPEVTCVVDVSHEDPE VKRWYVDGVVEVHNKAT KPREEQYNSTRVSVLT LHQDWLNGKEYKCKVSNK ALPAPERTSKANGQPREP QVYTLPPSRDELTKNQVSL TCLVGFPSDIAVEWESN GQFENNYKTTTPPLDSGS FFYSLKLVOKSRWQDGN VFCSVNHEALHNHYTQK SLSLPGK (SEQ ID NO:607)	AIQLTQSPSSLSASV GDRVITTCGASENIY GALNHWYQKPKGA PKLLYGATNLDGV PSRFSGSGSGTDFTL TISLQPEDFATYYC QNVLSPTTFGGGT KLEIK (SEQ ID NO:608)	RTVAAPSVEIF PPSEQLKSG TASVQCLLN FYPREKVV WKVDNALDS GNSQESVTEQ DSKDSYLSLS TLLSKADYEK HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:609)

FIG. 10Z

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy- chain cdr1 (imgt)	Heavy- chain cdr2 (imgt)	Heavy-chain cdr3 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB78	Human IgG1/kappa	Group 2	GYFTNW (SEQ ID NO:610)	INPSSGT (SEQ ID NO:611)	ARDGSVLF GY (SEQ ID NO:612)	QSLNSGIRK NY (SEQ ID NO:613)	SAS (SEQ ID NO:614)	KDSNYLT (SEQ ID NO:615)	QVQLVQSGAEVKNPG ASVSVKSCASGYTFN YMHMWRVQAPGQ GLEWMGYNPSGGY EYNQKRDRTMTIR DTSTVYIMELSLRS EDTAPYVCARDGSV LFGYWGQDTTYVYS (SEQ ID NO:616)	ASTKGPSVFLPASFSSSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVVTPSSSLG TQTYCNVNHKPSNTKVK KVPKSCDHTCTCPDAP ELGGPSVFLPPRPADTLM ISRTEVTCVVDVSHEDPE VKRWYVDGVEVHNART KPREEQYNSTRYVSULTV LHQDWLNGKEYKCKVSNK ALPAPKEIKSKANGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GDPENNYKTPPPLDSGGS FFYSLKLVDSKRWGQGN VFSCSVMHAEALHNHTQK SLSLSPGK (SEQ ID NO:617)	DIVMTQSPDLSAVS LGERATINCSSQSL LNSGIRKRWLAWYQ QNPQQPKLLYSAS TREGQUPREFSGG SGDTLTLSLQAE DVALPTCKCSNLYL TQQGQGLEIK (SEQ ID NO:618)	RTVAAPSVEIF PPSDQLSG TASVCLLN FYPREARVQ WKVDNALQS GNSQSVTEQ DSKOSTYLSL TTLTKADYEK HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:619)
			AVYSITSDY A (SEQ ID NO:620)	ITYSGST (SEQ ID NO:621)	ARSFY (SEQ ID NO:622)	QSIGTS (SEQ ID NO:623)	VAS (SEQ ID NO:624)	QQINSWP TT (SEQ ID NO:625)	QVQLQESGPGLVKPIS ETLSLTCAVSAYSITSD YAMHWIRQPPGKGL EWIGITYSGSTIRNP SLKSRVTSIVDSKNQ FSLKLSVTAAQTAVY YCARFCWVGQGT VTYSS (SEQ ID NO:626)	ASTKGPSVFLPASFSSSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVVTPSSSLG TQTYCNVNHKPSNTKVK KVPKSCDHTCTCPDAP ELGGPSVFLPPRPADTLM ISRTEVTCVVDVSHEDPE VKRWYVDGVEVHNART KPREEQYNSTRYVSULTV LHQDWLNGKEYKCKVSNK ALPAPKEIKSKANGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GDPENNYKTPPPLDSGGS FFYSLKLVDSKRWGQGN VFSCSVMHAEALHNHTQK SLSLSPGK (SEQ ID NO:627)	EIVMTQSPATLSVSP GERATLSCRASQSIG TSHHWYQQKPGQA PRLLIYASEISGIPA RFSGSGSGTEFTLTIS SLQSEDFAVYCCQI NSWPTTFGGTME IK (SEQ ID NO:628)	RTVAAPSVEIF PPSDQLSG TASVCLLN FYPREARVQ WKVDNALQS GNSQSVTEQ DSKOSTYLSL TTLTKADYEK HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:629)

FIG. 10AA

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (imgt)	Heavy-chain cd2 (imgt)	Heavy-chain cd3 (imgt)	Light-chain cd1 (imgt)	Light-chain cd2 (imgt)	Light-chain cd3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5T880	Human IgG1/kappa		GFNIKDYV (SEQ ID NO:630)	IDPENGDT (SEQ ID NO:631)	ARDMGSSY VY (SEQ ID NO:632)	SSVIY (SEQ ID NO:633)	STS (SEQ ID NO:634)	QRSSYP FT (SEQ ID NO:635)	QVQLVQSGAEVKKPG ASVYVSCASGFINIKD YMHMWVRQAPGQG LEWNGWIDPENGD ETAPFDORVTMTRD TSTVPMELSSUSE DTAVTYCARDMGSSY VYWGRTLVYSS (SEQ ID NO:636)	ASTKGPSPVPLAPSSISTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYKNVNHKPSNTKVOK KVEPKSCDTHCTCPCPAP ELGGPSVLEFPPHMDTLM IRTPETVCVVVDVSHEDPE VARNWYVDGVEVHNART KPREEQYNSTYRVVSVLT LHQDWLNGKEVCKNSNK ALPAPERTSKAKGQPREP QVYLTPPSRDELTKNQVSL TCLVKGYPYSDIAVEWESN GQPNENYKTTTPPLQSDGS FELYSKLTVDSKSRVQDGN VFCSYVMHEALHNHTYQK SLSLSPGK (SEQ ID NO:637)	DVIMTQSPAFLSVT PGEKVTTCASSTVI YMHMWVQKRPDQA PKLINSNTLASGVP SRFSGSGTDFTET USLEAEQAITYTCQ QRSTPTFTGQTKLEIK (SEQ ID NO:638)	RTVAAPSVEIF PRDEQLSG TASVCLLN FYPREAKVQ WKVDNALQS GNSQESVTEQ DSKOSTYLSL TTLTKADYEK HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:639)
V5T881	Human IgG1/kappa	Group 1	GFSLSTSG MG (SEQ ID NO:640)	IYVDDDK (SEQ ID NO:641)	ARRPDTFGSS YVD (SEQ ID NO:642)	ESVDYTGMSF (SEQ ID NO:643)	LAS (SEQ ID NO:644)	QQHNEDP WT (SEQ ID NO:645)	QVTLKEGPAVLPVT QTTLTCTSGFSLST GMGYSVIRQPPGKA LEWLAIHYWDDDKRY NPSLKSLTSLKSDTSK QVLTMTMTMDPVDI ATTYCARPDPVFCSSY VDWGGGTVTYSS (SEQ ID NO:646)	ASTKGPSPVPLAPSSISTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYKNVNHKPSNTKVOK KVEPKSCDTHCTCPCPAP ELGGPSVLEFPPHMDTLM IRTPETVCVVVDVSHEDPE VARNWYVDGVEVHNART KPREEQYNSTYRVVSVLT LHQDWLNGKEVCKNSNK ALPAPERTSKAKGQPREP QVYLTPPSRDELTKNQVSL TCLVKGYPYSDIAVEWESN GQPNENYKTTTPPLQSDGS FELYSKLTVDSKSRVQDGN VFCSYVMHEALHNHTYQK SLSLSPGK (SEQ ID NO:647)	DIVMTQTPLSVTP GQPASISCRASEVD TYGNSFMHWYLOK PGQPPQLLYLASNL DFGVPDRFSGSGG TDFLKISRAEVD GVYCCQNEPDW TFGGGTLEIK (SEQ ID NO:648)	RTVAAPSVEIF PRDEQLSG TASVCLLN FYPREAKVQ WKVDNALQS GNSQESVTEQ DSKOSTYLSL TTLTKADYEK HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:649)

FIG. 10BB

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr2 (imgt)	Heavy-chain cdr3 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
VSTB82	Human IgG1/kappa		GYSTSDYA (SEQ ID NO:650)	ITYSGST (SEQ ID NO:651)	ARSRGSTY WYFDV (SEQ ID NO:652)	ESVRYGTL (SEQ ID NO:653)	AAS (SEQ ID NO:654)	QQTIRNP WT (SEQ ID NO:655)	QVQLQESGPGLVKPS ETLSITCAVSGYSTSD YANNWIRQPPGKGL EWIGHTYSGSTNYNP SLKSRVTSVDTSKNQ FSLSRVTARITAVY YCARSHYGTWTFPD VWGGDTTVVSS (SEQ ID NO:656)	ASTKGPSVPLAPSSKSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGIYSLSVTVPSISLG TQTYKCNVNHPSNTKVDK KVEPKSCDTHTCPPCPAP ELLEGPSVLEPRKRDITM ISRTPEVTCVWDVSHEDPE KPREQYNSTYRVSVLT LHQDWLNGKEYKCKVSNK ALPAPIERTSKANGOPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPENNYKTPPALDSGGS FELSKLVKRSRWQDGN VFCSVNHKALHNYTQK SLSLSPGK (SEQ ID NO:657)	DIVMTQSPSLPVP GQPASISCRASEVE VYGTSLMQWYLOK PGQSPQLLVAASN VESGVDPDRFSGSGS GTDFTLKSRVEAE VGYYTCQTRKRP WTFGGGTLEIK (SEQ ID NO:658)	RTVAAPSVEIF PPSDQLKSG TASVYCLINN FPYREARVQ WKVDNALQS GNSQESVTEQ DSKDSYSLSS TLLSKADYEK HKVYACEVTH QGILSPYTISSF NRGEC (SEQ ID NO:659)
VSTB83	Human IgG1/kappa		GYFTSDYD (SEQ ID NO:660)	IYPGQGYT (SEQ ID NO:661)	ARWVGSTYA MDY (SEQ ID NO:662)	QSLVHSGNW TY (SEQ ID NO:664)	KVS (SEQ ID NO:664)	SQSTHVP T (SEQ ID NO:663)	QVQLVQSGAEVAKPG ASVYKSCASGYFTFS YDINWVRQAPGQGL EWMGWYPPGQGYTE YNEKRGVYTMTRDT STSTWYHLSLREED TAVYTCARWGYSYA MDYWGQGLTVVSS (SEQ ID NO:666)	ASTKGPSVPLAPSSKSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGIYSLSVTVPSISLG TQTYKCNVNHPSNTKVDK KVEPKSCDTHTCPPCPAP ELLEGPSVLEPRKRDITM ISRTPEVTCVWDVSHEDPE KPREQYNSTYRVSVLT LHQDWLNGKEYKCKVSNK ALPAPIERTSKANGOPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPENNYKTPPALDSGGS FELSKLVKRSRWQDGN VFCSVNHKALHNYTQK SLSLSPGK (SEQ ID NO:667)	DIVMTQSPSLPVP GQPASISCSQSLV HNGNTYLYWYLLQ KPGQSPQLLYKNSN RFGSGVDPDRFSGSGS GTDFTLKSRVEAE VGYYTCQSTHVP TFGGGTLEIK (SEQ ID NO:668)	RTVAAPSVEIF PPSDQLKSG TASVYCLINN FPYREARVQ WKVDNALQS GNSQESVTEQ DSKDSYSLSS TLLSKADYEK HKVYACEVTH QGILSPYTISSF NRGEC (SEQ ID NO:669)

FIG. 10CC

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr2 (imgt)	Heavy-chain cdr3 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB84 INX912	Human IgG1/kappa	Group 2	GYFTSYW (SEQ ID NO:570)	INPSTGVP (SEQ ID NO:571)	ARSTYDYG GAWFAY (SEQ ID NO:572)	ESVEYGTSL (SEQ ID NO:573)	AAS (SEQ ID NO:574)	QDSRRKPS T (SEQ ID NO:575)	QVQLVQSGAEVKKPG ASVKYSCASGYFTFS YMMHWVRQAPGQ GLEWWMGYINPSTGVP GYMDKFRVMTMR DTSTSYMIELSLRS EDTAVYTCARCYDY DGGAWFAYWGGGT TYTVSS (SEQ ID NO:576)	ASTKGPSVFPLAPSSSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYCNVNHHPSTNVDK KVEPASCQHTHTCPDAP ELGGPSVLEPPPKADTLIM IKRTPEVTCVVVDVSHEDPE VKRWYVDGVEVHNKAT KPREEQYNSTYRVISVLT LHQDWLNGKEYKCKVSNK ALPAPKEIKTSKANGQPREP QVYLTPPSRDELTKNQSL TCLVKGFPYSDIAVEHEN GQPNENYKTTTPPLDSGS FEYSKLVDSKRWQDGN VFCSCVMHEALHNHYTQK SLSLPGK (SEQ ID NO:577)	DIVMTQPLSLVTP GDPASISCRASESVE VYGTSLMQWYVQK PGQPPQLLYAASN VESGVPPDRBSGGS GTOFTLIERIEAD VGWYCCQDSRRKPS TFGGQTLKLEIK (SEQ ID NO:578)	RTVAAPSVFIF PPSDQLKSG TASVYCLNN FYPREAKVQ WKVDNALQGS GNSQESVTEQ DSKDSTYLSLS TLLSKADYER HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:579)
V5TB85 INX913	Human IgG1/kappa	Group 1	GYFTDYA (SEQ ID NO:580)	IDTYIGNT (SEQ ID NO:581)	ARGGGDALD Y (SEQ ID NO:582)	QSVSND (SEQ ID NO:583)	YAS (SEQ ID NO:584)	QQGYTSIR T (SEQ ID NO:585)	QVQLVQSGAEVKKPG ASVKYSCASGYFTFD YMMHWVRQAPGQ LEWNGVIDITYYGN NYMDKFRVMTMR DDTAVYTCARGGSD ALDYMGQGTITVYSS (SEQ ID NO:586)	ASTKGPSVFPLAPSSSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYCNVNHHPSTNVDK KVEPASCQHTHTCPDAP ELGGPSVLEPPPKADTLIM IKRTPEVTCVVVDVSHEDPE VKRWYVDGVEVHNKAT KPREEQYNSTYRVISVLT LHQDWLNGKEYKCKVSNK ALPAPKEIKTSKANGQPREP QVYLTPPSRDELTKNQSL TCLVKGFPYSDIAVEHEN GQPNENYKTTTPPLDSGS FEYSKLVDSKRWQDGN VFCSCVMHEALHNHYTQK SLSLPGK (SEQ ID NO:587)	DIQMTQSPSSLSAS VGDRTVITCKASQS VSNQVWVYQQKPG KAPKLIVYASNRYI GVPSRFSGSGSGTD FTFTSSLPQEDVATY YCCQGYTSIRTFGQ GTMLKIK (SEQ ID NO:588)	RTVAAPSVFIF PPSDQLKSG TASVYCLNN FYPREAKVQ WKVDNALQGS GNSQESVTEQ DSKDSTYLSLS TLLSKADYER HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:589)

FIG. 10DD

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (imgt)	Heavy-chain cd2 (imgt)	Heavy-chain cd3 (imgt)	Light-chain cd1 (imgt)	Light-chain cd2 (imgt)	Light-chain cd3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
VST887	Human IgG1/kappa		GYSITSGYS (SEQ ID NO:690)	IIRIGIT (SEQ ID NO:691)	AREDYDVG VFAY (SEQ ID NO:692)	QSGNN (SEQ ID NO:693)	YAS (SEQ ID NO:694)	QQSNHP HT (SEQ ID NO:695)	QVQLQESGQLVPS ETLSLTCVSGYSITSG YSWHWIRQPPGKGL EWICHTHYIGTNNIP SLSRVTISVDTSKNQ FSLSLSVTAAADTAVY YCAREDYDVGVFAY WGGGLTVYS (SEQ ID NO:696)	ASTKGPSVFPLAPELLSSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSMTVPSSSLG TOTYICNVNHRFSNTKVDK KVERKSCDTHCTCHCPAP ELLGGSVFLPPPKPKDRLIM ISRTPEVTCVVVDVSHEDPE VKFNWYVDGVEVHNKAT KPREQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPIERTISKAKGQPREP QVTLTPPSRDELTKNQVSL TCLVKGPSDIAVEWESN GQPNENYKTPPPLDSGGS FLYSKLTVDKSRWQQGN VFSCSVMHHEALHNHTQK SLSLSPK (SEQ ID NO:697)	EIVLTQSPATLSLSPG ERATLSCRASQISN NLHWYQQKPGQAP RLHWYASQISGIPA RFSGSGSGTDFTLTIS SLPEDSAVYCCQ SNWPHITGGITL EIK (SEQ ID NO:698)	RTVAAPSIF PSPDEQLKSG TASVCLLN FYPREKQV WKYDONALQS GNSQSVTEQ DSKDYSLSS TLTSKADYEK HKVYACEVTH QGLSPVTNSF NRGEC (SEQ ID NO:699)
			GFXLTNYD (SEQ ID NO:700)	IWTGGGT (SEQ ID NO:701)	AREGLLPV (SEQ ID NO:702)	QWGTN (SEQ ID NO:703)	SAS (SEQ ID NO:704)	QQYNLYP T (SEQ ID NO:705)	QVQLQESGQLVPS ETLSLTCVSGFLTWY DSWIRQPPGKGLW IGVINTGGGTNYNSA FMSRVTISVDTSKNQF SLSLSVTAAADTAVY CAREGLLPVWGGG TLVTKS (SEQ ID NO:706)	ASTKGPSVFPLAPELLSSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSMTVPSSSLG TOTYICNVNHRFSNTKVDK KVERKSCDTHCTCHCPAP ELLGGSVFLPPPKPKDRLIM ISRTPEVTCVVVDVSHEDPE VKFNWYVDGVEVHNKAT KPREQYNSTYRVVSVLTV LHQDWLNGKEYKCKVSNK ALPAPIERTISKAKGQPREP QVTLTPPSRDELTKNQVSL TCLVKGPSDIAVEWESN GQPNENYKTPPPLDSGGS FLYSKLTVDKSRWQQGN VFSCSVMHHEALHNHTQK SLSLSPK (SEQ ID NO:707)	DIQMTQSPSSLSAS VGDRVITTCIA SQN VGTNVAWYQQKPG KVPKLLYSASYYS GVPSPFSGSGSGTD FLTISLQPEDVATY YCDQYNLYPITGG GTRLEIK (SEQ ID NO:708)	RTVAAPSIF PSPDEQLKSG TASVCLLN FYPREKQV WKYDONALQS GNSQSVTEQ DSKDYSLSS TLTSKADYEK HKVYACEVTH QGLSPVTNSF NRGEC (SEQ ID NO:709)

FIG. 10EE

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr2 (imgt)	Heavy-chain cdr3 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB89	Human IgG1/kappa		GYTFNFG (SEQ ID NO:710)	INTYGEF (SEQ ID NO:711)	ARGAYYGS RWVFAY (SEQ ID NO:712)	QNLVHNGN TY (SEQ ID NO:713)	KVS (SEQ ID NO:714)	SSSSHPYT (SEQ ID NO:715)	QVQLVQSGSELKMPG ASVNVSKASGYFTFN FGMINWVRQAPGQG LEWINGWINTYGEF TYADDFKRFVSLDT SVSTAVLQCSLKAEDT AVTYCARGATYIGSR VWFATWQGTGLTV SS (SEQ ID NO:716)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSSVTPSSSLG TQTYICNVNHKPSNTKVDK KVPKSCDKHTCPCPAP ELGGPSVFLPPPKKDTLM ISRTEPCVVGVDSHEDPE VARNWYDGVVEVHNKT KPREEQYNSTYRVVSVLT LHQDWLNGKEYKCKVSNK ALPAPERTISKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPNPKYTKTTPPLDSGS FRTSKLTVDKSRWQQGN VFCSSVHMEALHNHTQK SLSLPGK (SEQ ID NO:717)	DIVMTQSPRLSPYTP GEFASISCTSQNLV HSNGNTYLUHWYIQ KPGQSPQLLYKVVSN RFSGVPDRFSGSGS GTDTLKSRVEAE WGVTYCSQSHVPY TFGGQTGLEK (SEQ ID NO:718)	RTVAAPSVEIF PPSECLLEG TASVCLLN FYPREARVQ WKVDNALQS GNSQSVTEQ DSKDSYLS TLLSKADYEK HKVYACEVTH QGLSPVTSF NRGEC (SEQ ID NO:719)
V5TB90	Human IgG1/kappa		GFSLTSSG (SEQ ID NO:720)	IMSGGNT (SEQ ID NO:721)	AREDYDOW YFDV (SEQ ID NO:722)	ESVEYGTSL (SEQ ID NO:723)	AAS (SEQ ID NO:724)	QSSRPV WT (SEQ ID NO:725)	QVQLQESGPGLVKPS ETLSLTCTYSGLTSS GVNHRQPPGKGL WIGVWISGNGTDYN AAFLSRVTSVDTSKN QFSLKLSVTAADTAV YICAREDYDQWYFD VMGGDTTVDS (SEQ ID NO:726)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSSVTPSSSLG TQTYICNVNHKPSNTKVDK KVPKSCDKHTCPCPAP ELGGPSVFLPPPKKDTLM ISRTEPCVVGVDSHEDPE VARNWYDGVVEVHNKT KPREEQYNSTYRVVSVLT LHQDWLNGKEYKCKVSNK ALPAPERTISKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPNPKYTKTTPPLDSGS FRTSKLTVDKSRWQQGN VFCSSVHMEALHNHTQK SLSLPGK (SEQ ID NO:727)	DIVMTQSPRLSPYTP GEFASISCTSQNLV HSNGNTYLUHWYIQ KPGQSPQLLYKVVSN RFSGVPDRFSGSGS GTDTLKSRVEAE WGVTYCSQSHVPY TFGGQTGLEK (SEQ ID NO:728)	RTVAAPSVEIF PPSECLLEG TASVCLLN FYPREARVQ WKVDNALQS GNSQSVTEQ DSKDSYLS TLLSKADYEK HKVYACEVTH QGLSPVTSF NRGEC (SEQ ID NO:729)

FIG. 10FF

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr2 (imgt)	Heavy-chain cdr3 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
			GYTFA NFW (SEQ ID NO:730)	IFPGNS DT (SEQ ID NO:731)	ARELTG TYTFDY (SEQ ID NO:732)	SSVS (SEQ ID NO:733)	SSS (SEQ ID NO:734)	HQWS GHFT (SEQ ID NO:735)	QVQLVQSGAEVKKPG ASVYVSCASGYTFA NFWNHWRCQAPGQ GLEWNGAIFGNSDT GYWQKGRVTMTIR DISTSTVFMELLSIR EDTATYYCARLITGY FDYWGQGTLVTVSS (SEQ ID NO:736)	ASTKGPSVFPAPSSKSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSLSLG TOTYKCNVNHPSNTKDK KVPEKCDHTHTCPDAP ELGGPSVLEPPPKDITLM ISRTPEVTCVVDVSHEDPE VKRWYVDGVEVHNHAKT KPREEQYNSTYRVSVLT LHQDWLNGKEYCKVSNK ALPAPHEKTSKANGDPRP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPENNYKTPPVLDSDGS FLYSKLTUQSRWQDGN VFCSVNHKALHNYTQK SLSLSPGK (SEQ ID NO:737)	EIVLTQSPATLSLSPG ERATLSCTATSSVY MHVYQKQNGQAP RLUYSSNLAGSDPA RESGSGGDTLTILIS SLEPEDAVTYCHQ WSGHFTFGQGTGLE IK (SEQ ID NO:738)	RTVAAPSVEIF PPSDQLKSG TASVYCLINN FYPREARVQ WIKVONALQS GN5QIESVTEQ DSKOSTYSLS TLLSKADYER HKVYACEVTH QGILSPVTFISF NRGEC (SEQ ID NO:739)
V5TB91	Human IgG1/kappa											
V5TB92	Human IgG1/kappa	Group 1	GYTFANYL (SEQ ID NO:740)	IVPGGGH (SEQ ID NO:741)	ARRFDYGGY FFDY (SEQ ID NO:742)	QSVHSHNGNI Y (SEQ ID NO:743)	KVS (SEQ ID NO:744)	FQGSHP WT (SEQ ID NO:745)	QVQLVQSGAEVKKPG ASVYVSCASGYTFA NYLIGWYRQAPGQRL EWMGDYPPGGGHSY NEKFGKRVITTRDTSA STAYMELLSLRSEDTA VYTCARRFDYGGYFF DYWGQGTLLTVSS (SEQ ID NO:746)	DIVMTQSPSLPVP GEPASISCSQSIV HSNGNIYLEWYLSQ PGQSPQLIWKYSNR FSGVDPDRFSGSGG TDTFLKISRVEADV GVYTCFQGSHPVW TFGQGTGLEIK (SEQ ID NO:748)	RTVAAPSVEIF PPSDQLKSG TASVYCLINN FYPREARVQ WIKVONALQS GN5QIESVTEQ DSKOSTYSLS TLLSKADYER HKVYACEVTH QGILSPVTFISF NRGEC (SEQ ID NO:749)	

FIG. 10GG

mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (imgt)	Heavy-chain cd2 (imgt)	Heavy-chain cd3 (imgt)	Light-chain cd1 (imgt)	Light-chain cd2 (imgt)	Light-chain cd3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
V5TB93	Human IgG1/kappa		GFSTINVD (SEQ ID NO:750)	HWGGGT (SEQ ID NO:751)	ARDREYGV DY (SEQ ID NO:752)	QSLVHNGN TY (SEQ ID NO:753)	KVS (SEQ ID NO:754)	QSSTHVPW T (SEQ ID NO:755)	QVQLQESGPGLVWPS ETLSLTCTVSGFSTINW DISWIRQPPGKLEW IGVWIGGGTMYNSA FMSRVTISVDSKNOF SMLSVTAADTAVVY CARDREYGVQDYWG QSTTVYSS (SEQ ID NO:756)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPVTV SWNSGALTSGVHTFPAVL QSSGLYSLSSVVPSSSLG TQTYKCNVHHPSTKVK KVERASQDFTCTCPDAP ELGGPSVFLPPPKDTLM ISRTEYTCVVVDVSHEDPE VARNWYVDGVEVHNART KPREEQYNSTRYVSULTV LHQDWLNGKEVCKVSNK ALPAPKEITSKANGQPREP QVYLPSPDELTKNQSL TCLVKGFPYSDIAVEWESN GDPENNYKTTTPPLDSGGS FEYSKLTUOKERNQDGN VFCSVMHEALHNHTQK SLSLPCK (SEQ ID NO:757)	DIVMTQTPLSLVTP GQPASISCRSSQSLV HSNGNTLHWYLYQ KPGQSPOLLHWKSN RFGSVPRDESGGS GTOFTLKRVEAD VGYYTCQSTHNP WTFGGGTKLEIK (SEQ ID NO:758)	RTVAAPSVEIF PPSDQLSG TASVCLLN FPREARKVQ WKVDNALQS GNSQESVTEQ DSKSTYLSL TTLTKADYEK HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:759)
V5TB94	Human IgG1/kappa		GYSTSDYA (SEQ ID NO:760)	MMYSGSA (SEQ ID NO:761)	ARFQHYGR FDY (SEQ ID NO:762)	SSVSY (SEQ ID NO:763)	EIS (SEQ ID NO:764)	QQWVWPLF T (SEQ ID NO:765)	QVQLQESGPGLVWPS ETLSLTCAVSGYSITSD YAMTWIRQPPGKGL EWIGTMMYSGGSAV NPFLKGRVTSVDTSK NPFLKLSVTAADTA VYTCARFDHYGRED YMGQGTIVYSS (SEQ ID NO:766)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPVTV SWNSGALTSGVHTFPAVL QSSGLYSLSSVVPSSSLG TQTYKCNVHHPSTKVK KVERASQDFTCTCPDAP ELGGPSVFLPPPKDTLM ISRTEYTCVVVDVSHEDPE VARNWYVDGVEVHNART KPREEQYNSTRYVSULTV LHQDWLNGKEVCKVSNK ALPAPKEITSKANGQPREP QVYLPSPDELTKNQSL TCLVKGFPYSDIAVEWESN GDPENNYKTTTPPLDSGGS FEYSKLTUOKERNQDGN VFCSVMHEALHNHTQK SLSLPCK (SEQ ID NO:767)	AIQLTQSPSSLSASV GDRVITTCASSSVS YHWYQKPGKAP KLLVYEISKLASGVPS RFSGSGSGTDFTLTIS SLQPEDFATYYCQQ WVYPLFTFGQGTKL EIK (SEQ ID NO:768)	RTVAAPSVEIF PPSDQLSG TASVCLLN FPREARKVQ WKVDNALQS GNSQESVTEQ DSKSTYLSL TTLTKADYEK HKVYACEVTH QGLSPVTKSF NRGEC (SEQ ID NO:769)

FIG. 10HH

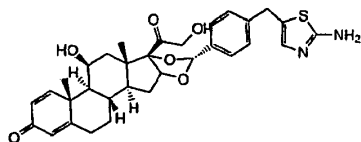
mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr2 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant	
V5TB95 INX903	Human IgG1/kappa	PVDKGHGV TF and RHPRLTF QDL Group 1	GFTFRNG (SEQ ID NO:770)	IISGGSYT (SEQ ID NO:771)	ARIYDIDG YAMDY (SEQ ID NO:772)	QSIWISNGH TY (SEQ ID NO:773)	KVS (SEQ ID NO:774)	FQGSHP WT (SEQ ID NO:775)	EVQLVESGGGLVQPG GSLRLCAASGFTFRN YGM5WVRQAPGKGL EWVASHSGSYTYP DSVKGFTISRDAK NSLVQMNSLRADDT AWYCARVDIDGTY YAMDTWGQGTITV SS (SEQ ID NO:776)	ASTKGPSVFLAPSSKTSGS GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLVSLSSVTVPSSSLG TQTYCNVNHKPSNTKVKDK KVEPKSCDKHTCTCPDAP ELGGPSVFLPPRPKDTLM ISRTPETCVVDVSHEDPE VKRWVVDGVGVHNAKT KPREEQYNSTRYRVSVLTV LHQDWLNGKEYKCKVSNK ALPAPKEITISKANGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPENNYKTPPAPLDSGS FFYKSLTVDSKRWQQGN VFCSYVMHEALHNHYTQK SLSLSPGK (SEQ ID NO:777)	DIVMTQSPQLLPVTP GEPASISGRCSSQSV HSNGNTYLEWYLOK PGQSPQLLYKVSNR ESGVPRDSFGSGG TDTFLMRVEAEQW GVYFCQSGSHVPW TFQGGTKLEIK (SEQ ID NO:778)	RTVAAPSVEIF PPSDQLKSG TASVQLLN FYPREKAVQ WKVDNALQS GNSQSVTEQ DSKOSTYLSL TTLTKADYEK HKVYACEVTH QGLSPVTKSF NIRGEC (SEQ ID NO:779)
V5TB96	Human IgG1/kappa							QVQLVQSGAEWKPG SSIVYSCASGYTFTS YDINWVRQAPGQGL EWIMGRVYFGDSTKY NEKFGKRVITADNST STAVMELSLRSEDTA VYICAREGITPFAYW GGGTVTVSS (SEQ ID NO:786)	ASTKGPSVFLAPSSKTSGS GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLVSLSSVTVPSSSLG TQTYCNVNHKPSNTKVKDK KVEPKSCDKHTCTCPDAP ELGGPSVFLPPRPKDTLM ISRTPETCVVDVSHEDPE VKRWVVDGVGVHNAKT KPREEQYNSTRYRVSVLTV LHQDWLNGKEYKCKVSNK ALPAPKEITISKANGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPENNYKTPPAPLDSGS FFYKSLTVDSKRWQQGN VFCSYVMHEALHNHYTQK SLSLSPGK (SEQ ID NO:787)	AIQLTQSPSSLSASV GDRVITTCRASIKSIS KYLAWYQQKPGKKA PKLLYSGLTQSGV PSRFSGSGSGTDFLT TISLQPEDFAFYTC QQHNEYPTWTFGGQ TLEIK (SEQ ID NO:788)	RTVAAPSVEIF PPSDQLKSG TASVQLLN FYPREKAVQ WKVDNALQS GNSQSVTEQ DSKOSTYLSL TTLTKADYEK HKVYACEVTH QGLSPVTKSF NIRGEC (SEQ ID NO:789)	

FIG. 10II

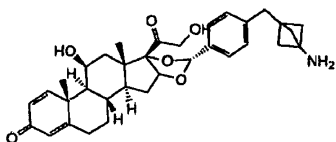
mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cd1 (img)	Heavy-chain cd2 (img)	Heavy-chain cd3 (img)	Light-chain cd1 (img)	Light-chain cd2 (img)	Light-chain cd3 (img)	Heavy-chain Variable	Light-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
VSTB97 INX91.4	Human IgG1/kappa	Group 1	GGTFSSYA (SEQ ID NO:790)	IIPKGT (SEQ ID NO:791)	ARSTVGW5Y EFDY (SEQ ID NO:792)	QSSSY (SEQ ID NO:793)	AAS (SEQ ID NO:794)	QQRSTPLT (SEQ ID NO:795)	QVQLVDSGAEVKKPG SSYKVSCKASGTFSS YAIWVRQAPGGGLE WMGGIPIGTANVA QIFQGRVITADESTS TAYNELSLRDEITAV YICASTVGVWSYFED YWGQGLTVVSS (SEQ ID NO:796)	DIQMTQSPSSLSAS VGDRTITCRASQSI SSYLNMWYQKPGK APKLIVAAASLSQSG VPSRFGSGSGTDFT LTSLQPEDFATYYC QQSTSLTPTGQGT KVEIK (SEQ ID NO:797)	ASTKGPSVFLPSPSSKTS GTAALGCLVVDYFPEPTV SWNSGALTSGVHTFPVAVL QSSGLYSLSSWTVPSLSIG TOTYCNVNHKPSNTKVDK KVEPKSCOKHTCPDAP ELGGSVLELPAPKDTLM ISRTPEVTCVVDVSHEDPE VARNWYDGVVHNKAT KPREEQYNSTYRVVSALT LHDDWNLNGREYKCKVSNK ALPAPIETISKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPNINIKTPPVLDSGGS FLYSKLTVDSRWQDGN VFESVMMHEALHNHTQK SLSPGK (SEQ ID NO:798)	RTVAAPSVEIF PPSQELSG TASVCLLN FYPREAKVQ WKVDNALQS GNSQSVTEQ DSKSTYLS TLTSKADYEK HKVYACEVTH QGLSRVTHSF NRREC (SEQ ID NO:799)	
VSTB98	Human IgG1/kappa	Group 1	GGTFSSYA (SEQ ID NO:800)	IIPKGT (SEQ ID NO:801)	ARSTVGW5Y EFDY (SEQ ID NO:802)	QSSSY (SEQ ID NO:803)	AAS (SEQ ID NO:804)	QQRSTPLT (SEQ ID NO:805)	QVQLVDSGAEVKKPG SSYKVSCKASGTFSS YAIWVRQAPGGGLE WMGGIPIGTANVA QIFQGRVITADESTS TAYNELSLRDEITAV YICASTVGVWSYFED YWGQGLTVVSS (SEQ ID NO:806)	DIQMTQSPSSLSAS VGDRTITCRASQSI SSYLNMWYQKPGK APKLIVAAASLSQSG VPSRFGSGSGTDFT LTSLQPEDFATYYC QQSTSLTPTGQGT KVEIK (SEQ ID NO:807)	ASTKGPSVFLPSPSSKTS GTAALGCLVVDYFPEPTV SWNSGALTSGVHTFPVAVL QSSGLYSLSSWTVPSLSIG TOTYCNVNHKPSNTKVDK KVEPKSCOKHTCPDAP ELGGSVLELPAPKDTLM ISRTPEVTCVVDVSHEDPE VARNWYDGVVHNKAT KPREEQYNSTYRVVSALT LHDDWNLNGREYKCKVSNK ALPAPIETISKAKGQPREP QVYTLPPSRDELTKNQVSL TCLVKGFPYSDIAVEWESN GQPNINIKTPPVLDSGGS FLYSKLTVDSRWQDGN VFESVMMHEALHNHTQK SLSPGK (SEQ ID NO:808)	RTVAAPSVEIF PPSQELSG TASVCLLN FYPREAKVQ WKVDNALQS GNSQSVTEQ DSKSTYLS TLTSKADYEK HKVYACEVTH QGLSRVTHSF NRREC (SEQ ID NO:809)	

FIG. 10JJ

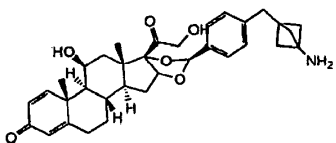
mAb ID	Description	Epitope Sequence/ Epitope Group	Heavy-chain cdr1 (imgt)	Heavy-chain cdr2 (imgt)	Heavy-chain cdr3 (imgt)	Light-chain cdr1 (imgt)	Light-chain cdr2 (imgt)	Light-chain cdr3 (imgt)	Heavy-chain Variable	Heavy-chain Constant	Light-chain Variable	Light-chain Constant
VST899	Human IgG1/kappa	Group 1	GGTSSYA (SEQ ID NO:810)	IIPIKGT (SEQ ID NO:811)	ARIIVLQWV ELDY (SEQ ID NO:812)	QSISSY (SEQ ID NO:813)	AAS (SEQ ID NO:814)	QQSYSTPL (SEQ ID NO:815)	QQLVQSGAEVKNPG SSVWVSCASGEGTSS YASVWVRQAPGGGLE WMGGIIPFGTANYA QNFQGRVITADETS TAYWELSSLRSEDIAV TYCARHVLGWVLEID YMGCGGLTVYSS (SEQ ID NO:816)	ASTKGPSVFPLAPSSKSTSG GTAALGCLVKDYFPEPTV SWNSGALTSGVHTFPAVL QSSGLYSLSVTVPSSSLG TQTYCNVNHKPSNTKVK KVEPKSCDKHTCPDAP ELGGPSVFLEPPKIDTLM ISRTPEYTCVDVSHEDPE VAFNWYVDGVVHNART KPREEQYNSTRVSVLTV LHQDWLNGKEYKCKVSNH ALPAPKEPTISKAKGPREP QVYLPFPFDLTQNKVSL TCLVKGFPYSDIAVEWESN GDPENNYKTPPVLDSGS FFYSLKLVNKSRIHQGN VFCSSVMHEALHNHTQK SLSLPGK (SEQ ID NO:817)	DIQMTQSPSSLSAS VGDWVITTCRAQS1 SSYLNWYQQK PGK APKLIYAASSLQSG VPSRFSGSGSDFT LITSSLOPEDEATYYC QDSYSTRITGGQT KVEIK (SEQ ID NO:818)	RTVAAPSFRF PFSDEQLSG TASVCLLN FYPKARKQ WKVDNALGS GNDSQSVTEQ DSKDSYSSLS TCLSKADYEK HKVYACEVTH QGLSPVTKSF NKGEC (SEQ ID NO:819)

FIG. 11A**Exemplary Steroid Structures**

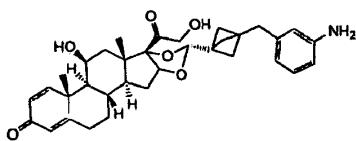
INX-SM-1 (6a*R*,6b*S*,7*S*,8a*S*,8b*S*,10*R*,11a*R*,12a*S*,12b*S*)-10-(4-((2-aminothiazol-5-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4*H*-naphtho[2',1':4,5]indeno[1,2-*d*][1,3]dioxol-4-one



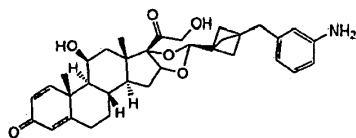
INX-SM-3 (6a*R*,6b*S*,7*S*,8a*S*,8b*S*,10*R*,11a*R*,12a*S*,12b*S*)-10-(4-((3-aminobicyclo[1.1.1]pentan-1-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4*H*-naphtho[2',1':4,5]indeno[1,2-*d*][1,3]dioxol-4-one



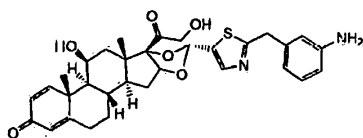
INX-SM-53 (6a*R*,6b*S*,7*S*,8a*S*,8b*S*,10*S*,11a*R*,12a*S*,12b*S*)-10-(4-((3-aminobicyclo[1.1.1]pentan-1-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4*H*-naphtho[2',1':4,5]indeno[1,2-*d*][1,3]dioxol-4-one



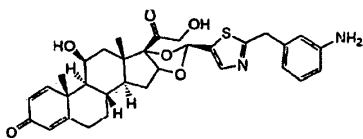
INX-SM-4 (6a*R*,6b*S*,7*S*,8a*S*,8b*S*,10*R*,11a*R*,12a*S*,12b*S*)-10-(3-(3-aminobenzyl)bicyclo[1.1.1]pentan-1-yl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4*H*-naphtho[2',1':4,5]indeno[1,2-*d*][1,3]dioxol-4-one

FIG. 11B**Exemplary Steroid Structures**

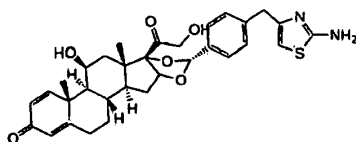
INX-SM-54 (6a*R*,6b*S*,7*S*,8a*S*,8b*S*,10*S*,11a*R*,12a*S*,12b*S*)-10-(3-(3-aminobenzyl)bicyclo[1.1.1]pentan-1-yl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4*H*-naphtho[2',1':4,5]indeno[1,2-*d*][1,3]dioxol-4-one



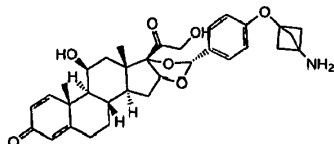
INX-SM-6 (6a*R*,6b*S*,7*S*,8a*S*,8b*S*,10*R*,11a*R*,12a*S*,12b*S*)-10-(2-(3-aminobenzyl)thiazol-5-yl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4*H*-naphtho[2',1':4,5]indeno[1,2-*d*][1,3]dioxol-4-one



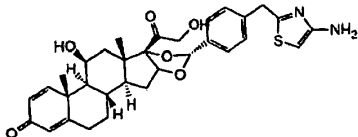
INX-SM-56 (6a*R*,6b*S*,7*S*,8a*S*,8b*S*,10*S*,11a*R*,12a*S*,12b*S*)-10-(2-(3-aminobenzyl)thiazol-5-yl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4*H*-naphtho[2',1':4,5]indeno[1,2-*d*][1,3]dioxol-4-one



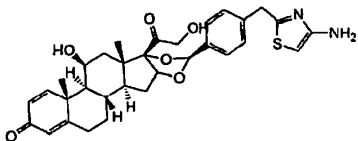
INX-SM-2 (6a*R*,6b*S*,7*S*,8a*S*,8b*S*,10*R*,11a*R*,12a*S*,12b*S*)-10-(4-((2-aminothiazol-4-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4*H*-naphtho[2',1':4,5]indeno[1,2-*d*][1,3]dioxol-4-one

FIG. 11C**Exemplary Steroid Structures**

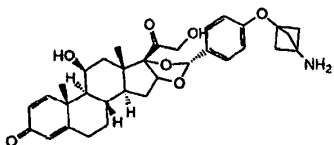
INX-SM-8 (6a*R*,6b*S*,7*S*,8a*S*,8b*S*,10*R*,11a*R*,12a*S*,12b*S*)-10-(4-((3-aminobicyclo[1.1.1]pentan-1-yl)oxy)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4*H*-naphtho[2',1':4,5]indeno[1,2-*d*][1,3]dioxol-4-one



INX-SM-7 (6a*R*,6b*S*,7*S*,8a*S*,8b*S*,10*R*,11a*R*,12a*S*,12b*S*)-10-(4-((4-aminothiazol-2-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4*H*-naphtho[2',1':4,5]indeno[1,2-*d*][1,3]dioxol-4-one



INX-SM-57 (6a*R*,6b*S*,7*S*,8a*S*,8b*S*,10*S*,11a*R*,12a*S*,12b*S*)-10-(4-((4-aminothiazol-2-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4*H*-naphtho[2',1':4,5]indeno[1,2-*d*][1,3]dioxol-4-one



INX-SM-8 (6a*R*,6b*S*,7*S*,8a*S*,8b*S*,10*R*,11a*R*,12a*S*,12b*S*)-10-(4-((3-aminobicyclo[1.1.1]pentan-1-yl)oxy)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4*H*-naphtho[2',1':4,5]indeno[1,2-*d*][1,3]dioxol-4-one

FIG. 12A**Exemplary Anti-VISTA mAb Sequences (without signal sequences)****INX200**

>INX200_HC

QVQLVQSGAEVKKPGASVKVSCKASGYTFANYLIGWVRQAPGQRLEWMGDIYPGGGFISYNEKF
 KGRVTITRDTASTAYMELSSLRSEDTAVYYCARRFDYGGYFFDYWGQGLTVTVSSASTKGPSV
 FPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVP
 SSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMI
 SRTPEVTCVVDVSHRDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGK
 EYKCAVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEW
 ESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSP
 GK

>INX200_LC

DIVMTQSPFLSLPVTGPGEPAISCRSSQSIHVSNGNIYLEWYLQKPGQSPQLLIYKVSNRFSGPV
 DRFSGSGSGTDFTLKISRVEAEDVGVYYCFQGSHPVPTFGQGTKLEIKRTVAAPSVFIFPPSDE
 QLKSGTASVVCCLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTLSKADYE
 KHKVYACEVTHQGLSSPVTKSFNRGEC

767-IgG1.3

>767-IgG1.3_HC

EVQLVESGGLVQPGKSLRLSCAASGFTLEDYAMHWVRQAPGKGLEWVSGIDWNSNIGYADSV
 KGRFTISRDNAKNSLYLQMNSLRTEDTALYYCAKVPGYSGGWDAEDDWGQGMVTVSSASTKG
 PSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSV
 TVPSSSLGTQTYICNVNHKPSNTKVDKRVPEPKSCDKTHTCPPCPAPEAEGAPSVFLFPPKPKDT
 LMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWL
 NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIA
 VEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLS
 LSPG

>767-IgG1.3_LC

EIVLTQSPGTLSTLSPGERATLSCRASQSVSSSYLAWYQQKPGQAPRLLIYGASSRATGIPDRFS
 GSGSGTDFTLTISRLEPEDFAVYYCQQYGSSPFTFGPGTKVDIKRTVAAPSVFIFPPSDEQLKS
 GTASVVCCLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTLSKADYEKHKV
 YACEVTHQGLSSPVTKSFNRGEC

INX201

>INX201_HC

QVQLVQSGAEVKKPGASVKVSCKASGYTFANYLIGWVRQAPGQRLEWMGDIYPGGGFISYNEKF
 KGRVTITRDTASTAYMELSSLRSEDTAVYYCARRFDYGGYFFDYWGQGLTVTVSSASTKGPSV
 FPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVP
 SSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMI
 SRTPEVTCVVDVSHRDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGK
 EYKCAVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEW

FIG. 12B

ESNGQPENNYKTTTPVLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSP
GK

>INX201_LC

DIVMTQSPSLPVTGPGEPAISCRSSQSIVHSNGNIYLEWYLQKPGQSPQLLIYKVSNRFSGVP
DRFSGSGSGTDFTLKISRVEAEDVGVYYCFQGSHVPWTFGQGTKLEIKRTVAAPSVFIFPPSDE
QLKSGTASVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTLSKADYE
KHKVYACEVTHQGLSSPVTKSFNRGEC

INX231

>INX231_HC

QVQLVQSGAEVKKPGASVKVSCKASGYTFTSYWLHWVRQAPGGLEWMGYIIPNTLHTDYNQKF
KDRVTMTRDTSTSTVYMELSSLRSEDTAVYYCARLDGDYDIALDYWGQGLTVTVSSASTKGPSV
FPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTV
SSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKHTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMI
SRTPEVTCVVDVSHRDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGK
EYKCAVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTTPVLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSP
GK

>INX231_LC

DIVMTQTPLSLSVTPGQPASISCRASESVEYYGTSFMQWYLQKPGQPPQLLIYTASNVESGVPD
RFSGSGSGTDFTLKISRVEAEDVGVYYCQQSRKVPYTFGQGTKLEIKRTVAAPSVFIFPPSDEQ
LKSGTASVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

INX234

>INX234_HC

EVQLVQSGAEVKKPGESLKISCKGSGYSFTSYWIGWVRQMPGKLEWMGIIYPGDS DTRYSPSF
QGQVTISADKSISTAYLQWSSLKASDTAMYCARD DALYGGYYLDYWGQGLTVTVSSASTKGPS
VFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTV
PSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKHTHTCPPCPAPEAAGGPSVFLFPPKPKDTLM
ISRTPEVTCVVDVSHRDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNG
KEYKCAVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVE
WESNGQPENNYKTTTPVLDSGSGFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSP
PGK

>INX234_LC

DIVMTQSPDSLAVSLGERATINCKSSQSVLYSSNNKNYLAWYQQKPGQPPKLLIYWASTRESGV
PDRFSGSGSGTDFTLTISSLQAEDVAVYYCQQYYSTPLTFGQGTKVEIKRTVAAPSVFIFPPSD
EQLKSGTASVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTLSKADYE
EKHKVYACEVTHQGLSSPVTKSFNRGEC

FIG. 12C**INX237**

>INX237_HC

QVQLVQSGAEVKKPGASVKVSCKASGYPTGYFMHWVRQAPGGLEWMGRINPYNGGTVYNQNF
NDRVTMTRDTSTSTVYMESSLRSEDVAVYYCARWTFDGLFMDYWGQGTITVTVSSASTKGPSVF
PLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPS
SSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMIS
RTPEVTCVVVDVSHRDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
YKCAVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWE
SNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG
K

>INX237_LC

DVVMTQSPFLSLPVTLGQPASISCRASENVDKYGISFMNWFQQRPGQSPRRLIYATSNQGSVDP
RFSGSGSGTDFTLKISRVEADVGVYCCQSKEDPYTFGQGTKLEIKRTVAAPSVFIFPPSDEQ
LKSGTASVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

INX240

>INX240_HC

QVQLVQSGAEVKKPGASVKVSCKASGYTFTDYVISWVRQAPGGLEWMGEIYPGSGNTYYEKF
KGRVTMTRDTSTSTVYMESSLRSEDVAVYYCARVLVSVMDYWGQGLVTVSSASTKGPSVFPL
APSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPS
LGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRT
PEVTCVVVDVSHRDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYK
CAVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESN
GQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

>INX240_LC

EIVLTQSPDFQSVTPKEKVTITCSASSSINYITWYQQKPDQSPKLLIKDTSKLAGVPSRFSGS
GSGTDFTLTINSLEAEDAATYYCHQRSSYPWTFGQGTREIKRTVAAPSVFIFPPSDEQLKSGT
ASVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTLSKADYEKHKVYA
CEVTHQGLSSPVTKSFNRGEC

FIG. 13

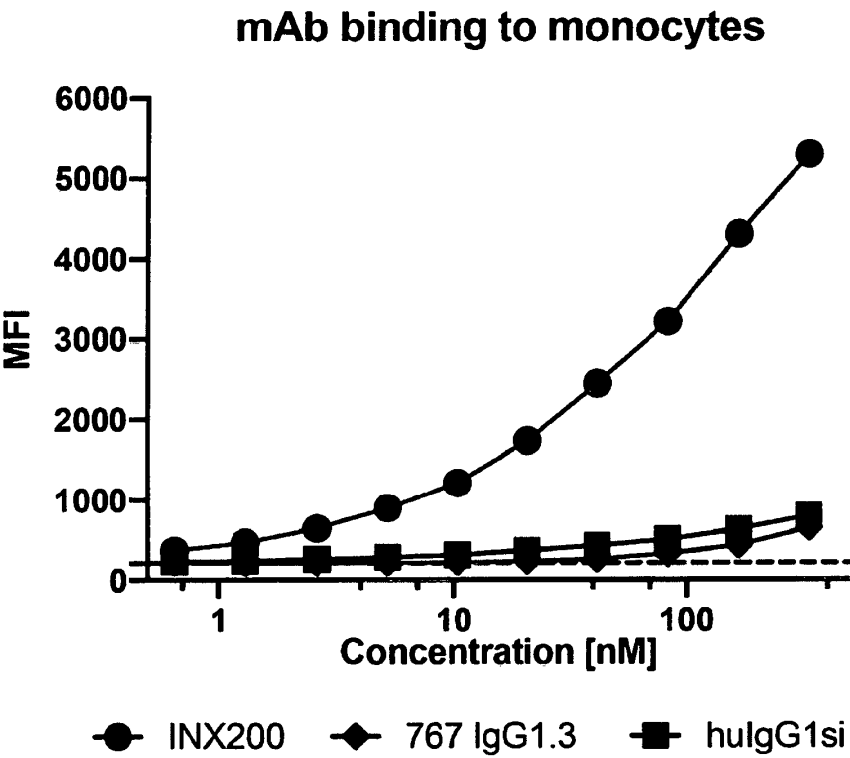


Figure 13: Binding study for INX200, and 767-IgG1.3 vs. human IgG1si. Median fluorescence intensity measured for monocytes incubated with serial dilutions of antibodies tested (0-333 nM); dashed black line corresponds to autofluorescence of unstained cells; n=1.

FIG. 14

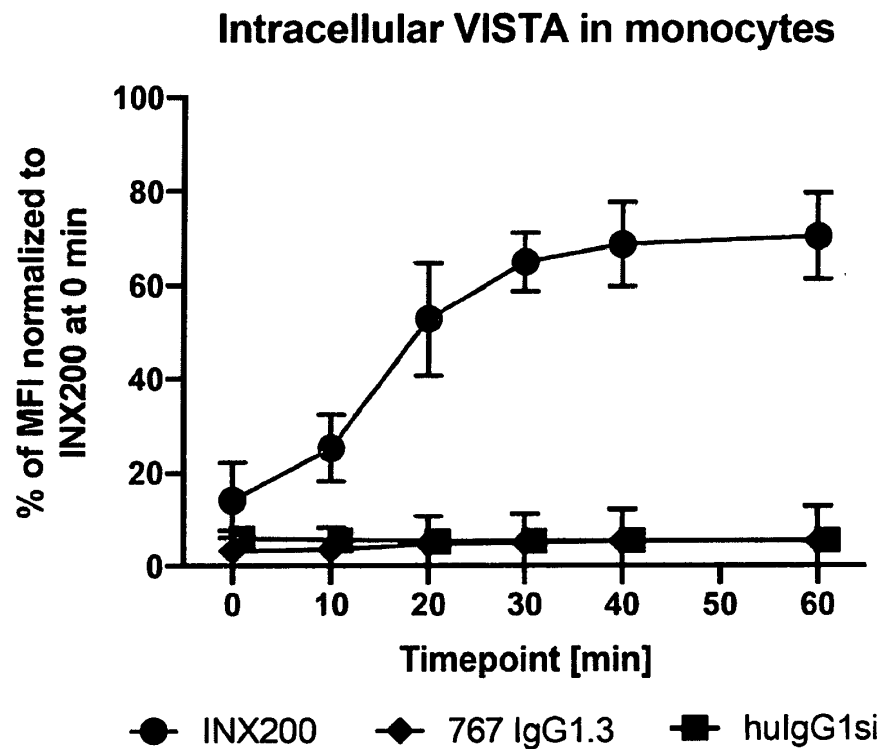


Figure 14: Internalized fraction of anti-VISTA antibodies. The intracellular pool of the cell bound antibodies were plotted over the 60 min of the timecourse; for each data point fluorescence was normalised to fluorescence of INX200 at time 0 min; mean $\pm$ SD n=2 donors.

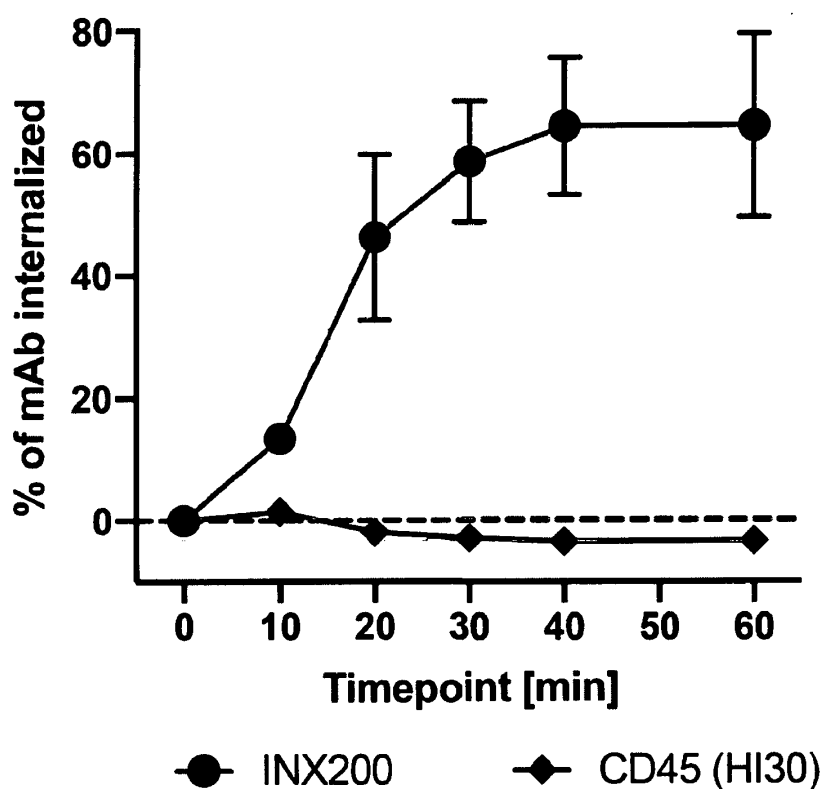
FIG. 15**INX200 Internalization rate in monocytes**

Figure 15: The internalization rate of the INX200 antibody. The internalization rate of INX200 antibody was assessed in monocytes over 60 min timecourse; anti-CD45 antibody was not internalized at any timepoint; shown as mean $\pm$ SD, n=2 donors.

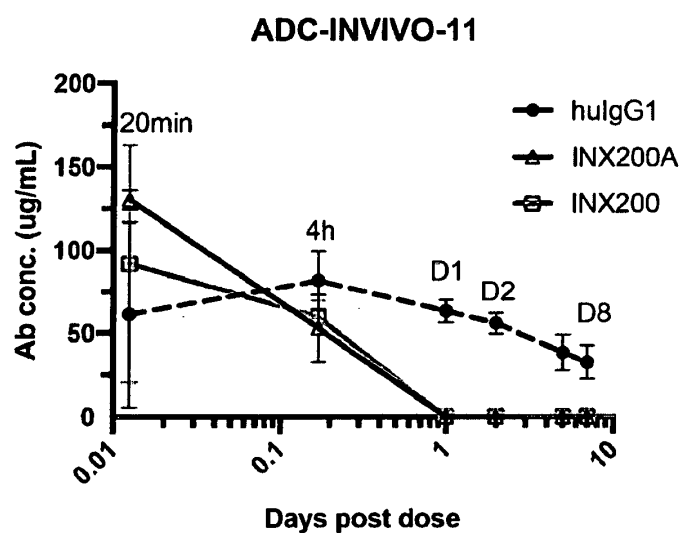
FIG. 16

Figure 16: PK study for INX200, INX200A vs. human IgG1. Plasma concentrations of antibodies at annotated time points in hVISTA KI mice (SD; n=5/group).

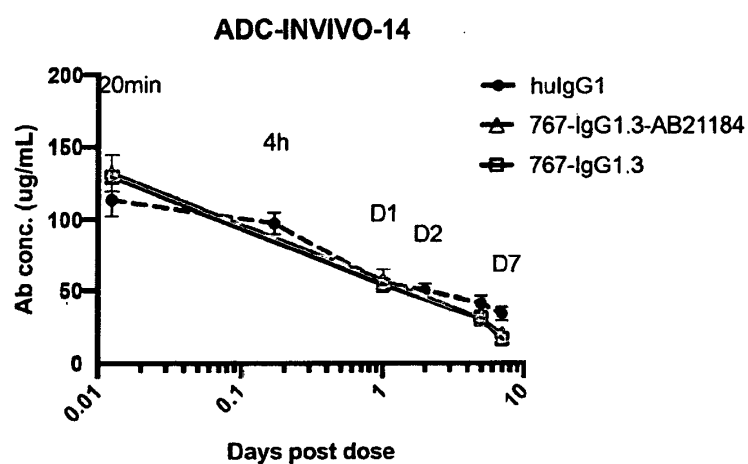
FIG. 17

Figure 17: PK study for 767-IgG1.3, 767-IgG1.3A vs. human IgG1. Plasma concentrations of antibodies at annotated time points in hVISTA KI mice (SD; n=5/group).

FIG. 18

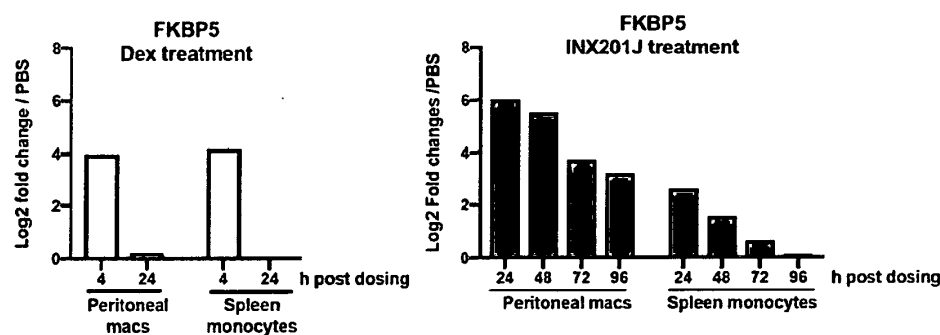


Figure 18: FKBP5 transcriptional activation following Dex (left) and ADC INX201J (right) treatment in peritoneal resident macrophages and spleen monocytes. Dex (left) effects were evaluated at 4 and 24h post 1 single i.p. injection at 2 mg/Kg. ADC (right) effects were analyzed at 24, 48, 72 and 96h post 1 single i.p. injection at 10 mg/Kg delivering 0.2 mg/Kg of GC payload. FKBP5 transcription levels were measured by real time PCR and presented as Log2 fold change vs. PBS control group. Four mice per group were pooled together to generate sufficient material for the RNA preparation.

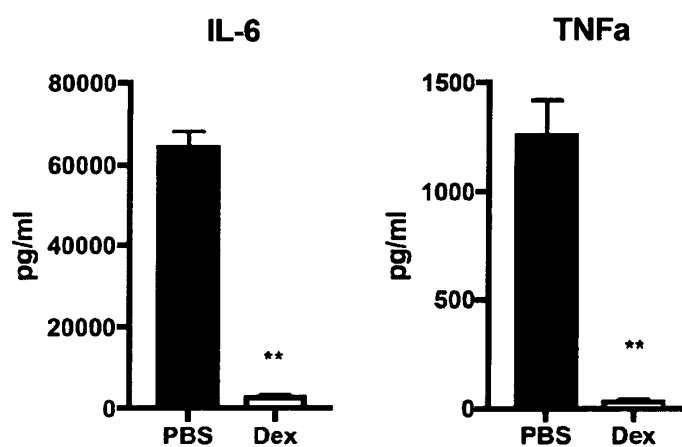
FIG. 19

Figure 19: *In vivo* Dex treatment prevents the *ex vivo* induction of pro-inflammatory cytokines in PRM. Dex effects were evaluated at 2h post 1 single i.p. injection at 2 mg/Kg; IL-6 and TNFα were evaluated on cell supernatant (collected at 1h) using a mouse 32-plex (see methods section) (n=4 mice/group; unpaired T test).

FIG. 20

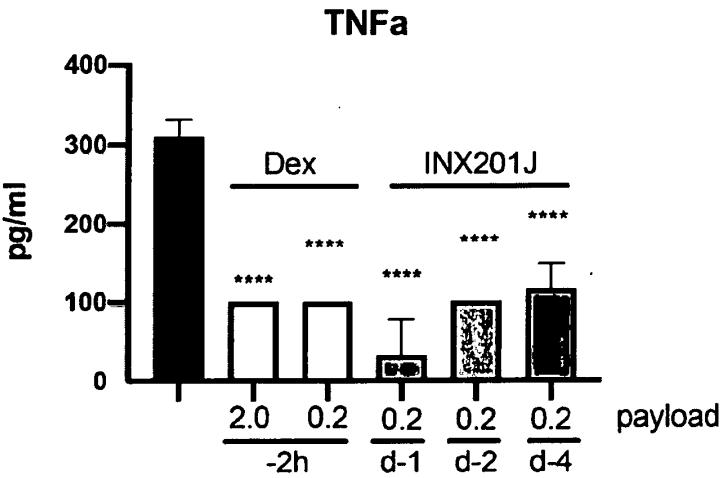


Figure 20: *In vivo* INX201J or Dex treatment prevents the *ex vivo* induction of TNFα in PRIM. Dex effects were evaluated at 2h post 1 single i.p. injection at 2 and 0.2 mg/Kg; INX201J effects were evaluated at 1 day (d-1), 2 days (d-2) and 4 days (d-4) post injection at 10 mg/Kg (equivalent to 0.2 mg/Kg payload). Cell supernatants were collected at 2h. TNFα was measured using an ELISA (see methods section) (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group).

FIG. 21

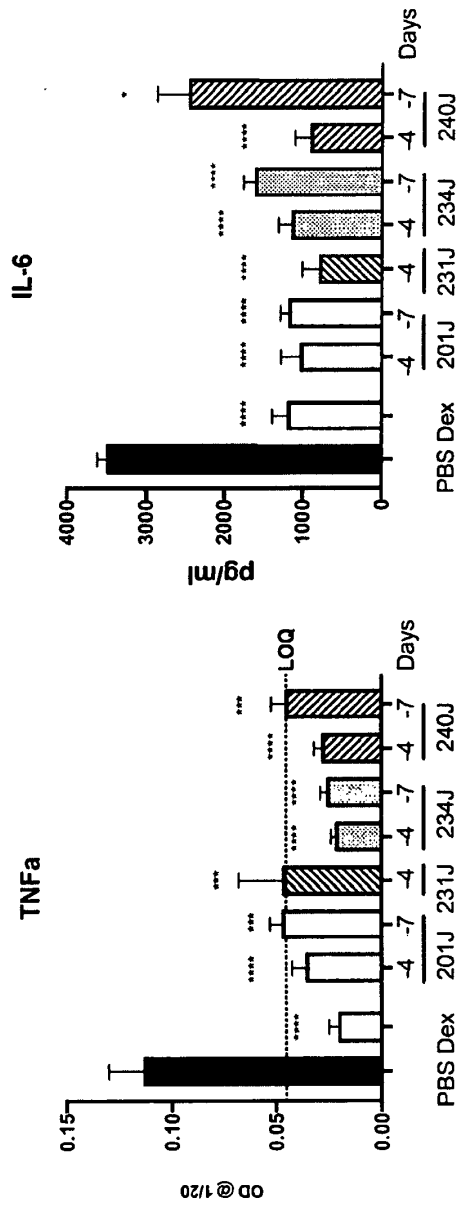


Figure 21: All ADC have long-term impact on the ex vivo induction of TNFα and IL-6 in PRM. Dex effects were evaluated at 2h post 1 single i.p. injection at 2 mg/kg; INX201J, INX231J, INX234J and INX240J effects were evaluated at 4 days (-4) and 7 days (-7) post 1 single i.p. injection at 10 mg/kg. Cell supernatants were collected at 2h. TNFα and IL-6 were measured using ELISA (see methods section) (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group, SEM).

FIG. 22

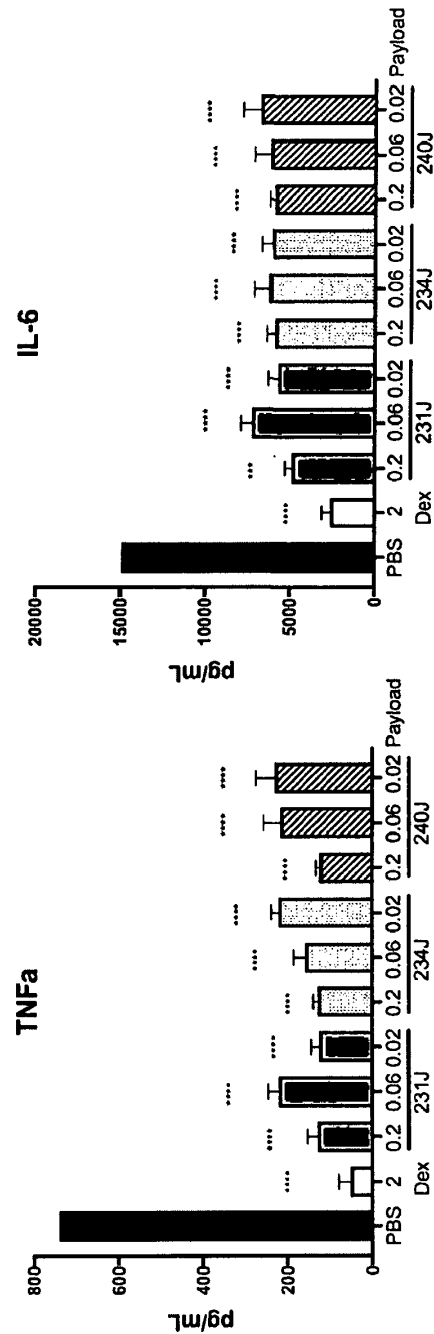


Figure 22: INX231J, INX234J and INX240J ADCs have comparable potencies in preventing *ex vivo* induction of TNFα and IL-6 in PRM. Dex effects were evaluated at 2h post 1 single i.p. injection at 2 mg/Kg; INX231J, INX234J and INX240J effects were evaluated at 7 days post 1 single i.p. injection at 10, 3 or 1 mg/Kg (0.2, 0.06 and 0.02 mg/Kg of GC payload). Cell supernatants were collected at 2h. TNFα and IL-6 were measured using ELISA (see methods section) (n=4 mice/group except for the PBS group n=1, for technical reasons; ordinary one-way ANOVA as compared to PBS-only group, SEM).

FIG. 23

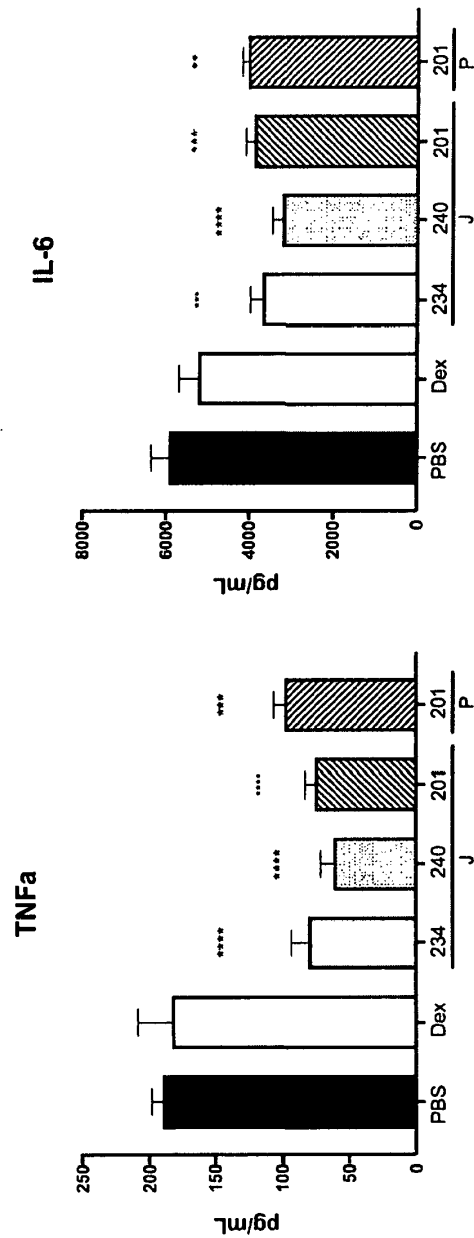


Figure 23: INX201J, INX201P, INX234J and INX240J ADCs have comparable potencies in preventing *ex vivo* induction of TNFα and IL-6 in PRM. INX201J, INX201P, INX234J, INX240J and Dex effects were evaluated at 7 days post 1 single i.p. injection; ADCs were dosed at 10 mg/Kg (0.2mg/Kg of GC payload) and Dex at 2 mg/Kg. Cell supernatants were collected at 2h. TNFα and IL-6 were measured using ELISA (see methods section) (n=4 mice/group except for the PBS and Dex groups with n=3, for technical reasons; ordinary one-way ANOVA as compared to PBS-only group, SEM).

FIG. 24

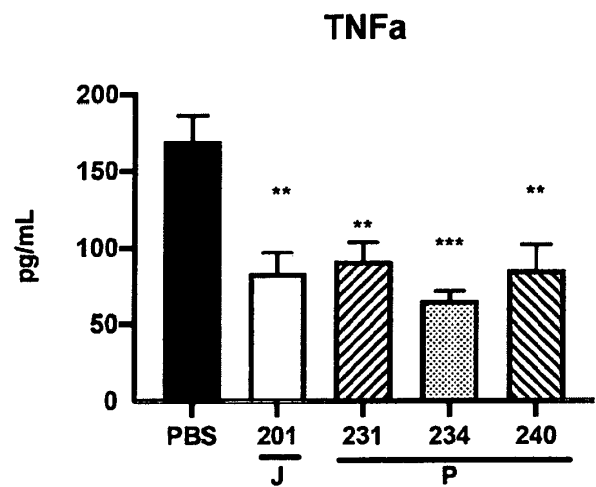


Figure 24: INX201J, INX231P, INX234P and INX240P ADCs have comparable potencies in preventing *ex vivo* induction of TNFα in PRM. ADCs effects were evaluated at 7 days post 1 single i.p. injection; ADCs were dosed at 10 mg/Kg (0.2mg/Kg of GC payload). Cell supernatants were collected at 2h. TNFα and IL-6 were measured using ELISA (see methods section) (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group, SEM).

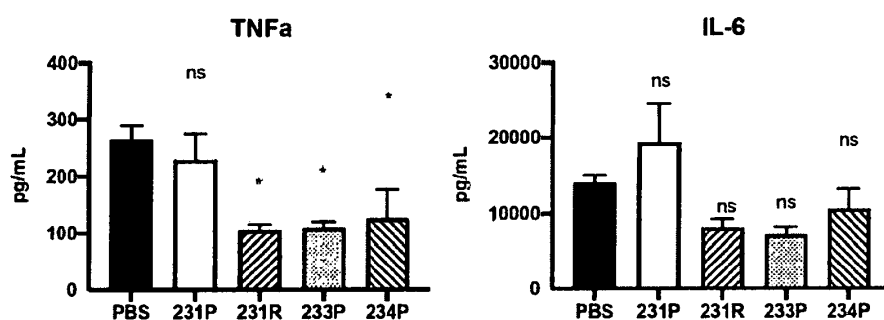
FIG. 25

Figure 25: INX231P, INX231R, INX233P and INX234P have comparable potencies in preventing *ex vivo* induction of TNFα and IL-6 in PRM. ADCs effects were evaluated at 7 days post 1 single i.p. injection; ADCs were dosed at 10 mg/Kg (0.2mg/Kg of GC payload). Cell supernatants were collected at 24h. TNFα and IL-6 were measured using ELISA (see methods section) (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group, SEM).

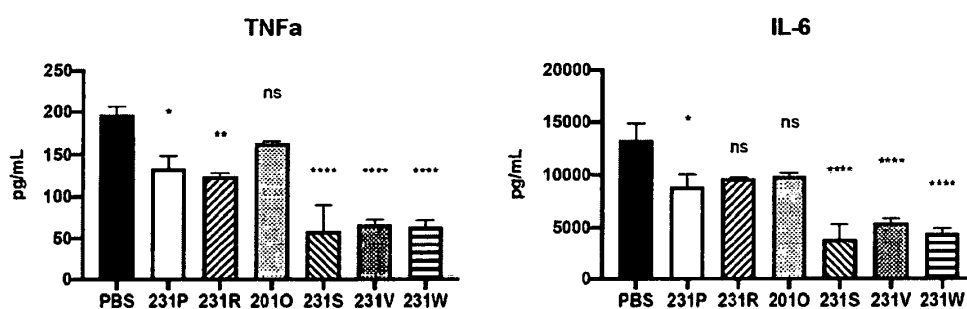
FIG. 26

Figure 26: Potency evaluation of GC linker payloads INX R, INX O, INX S, INX V and INX W vs INX P conjugated to INX231 or INX201 in preventing *ex vivo* induction of TNF α and IL-6 in PRM. ADC effects were evaluated at 7 days post 1 single i.p. injection; ADCs were dosed at 0.2mg/Kg of GC payload. Cell supernatants were collected at 24h. TNF α and IL-6 were measured using ELISA (see methods section) (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group, SEM).

FIG. 27

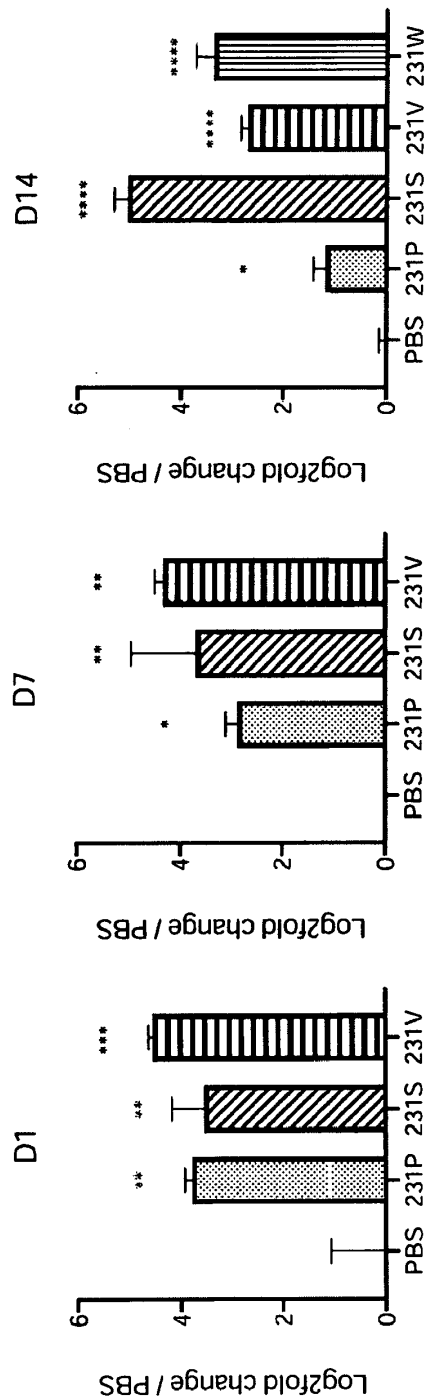


Figure 27: Potency evaluation of GC payloads INX231S, INX231V, and INX231W vs INX231P in inducing FKBP5 transcription in PRIM. ADCs effects were evaluated at 1, 7 and 14 days post 1 single i.p. injection; ADCs were dosed at 0.2mg/Kg of GC payload. FKBP5 expression was measured by quantitative real time PCR and presented as Log2 fold change vs. PBS control group (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group, SEM).

FIG. 28

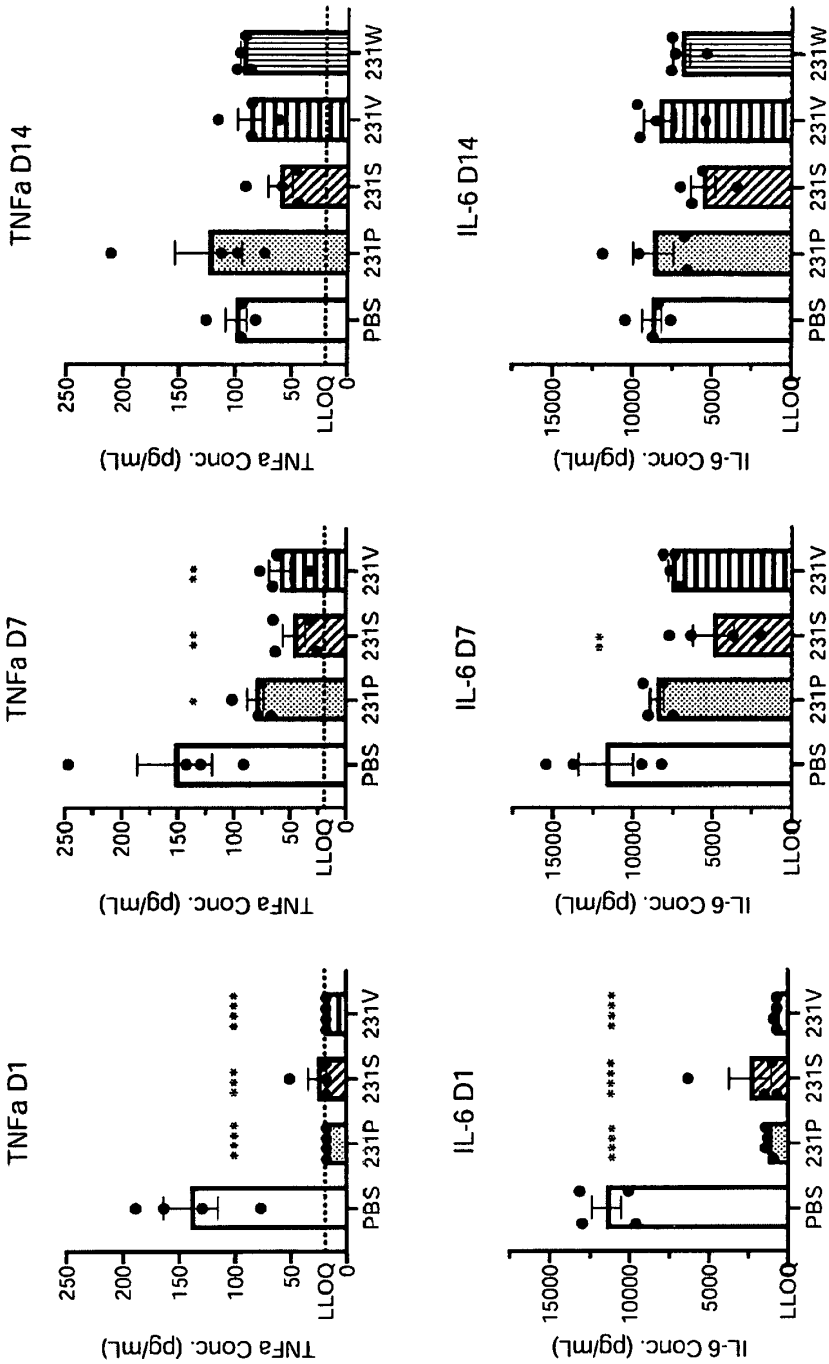


Figure 28: Potency evaluation of GC payloads INX231S, INX231V, and INX231P in preventing ex vivo induction of TNFα and IL-6 in PRM. ADCs effects were evaluated at 1, 7 and 14 days post 1 single i.p. injection; ADCs were dosed at 0.2mg/kg of GC payload. Cell supernatants were collected at 24h. TNFα and IL-6 were measured using ELISA (see methods section) (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group, SEM).

FIG. 29

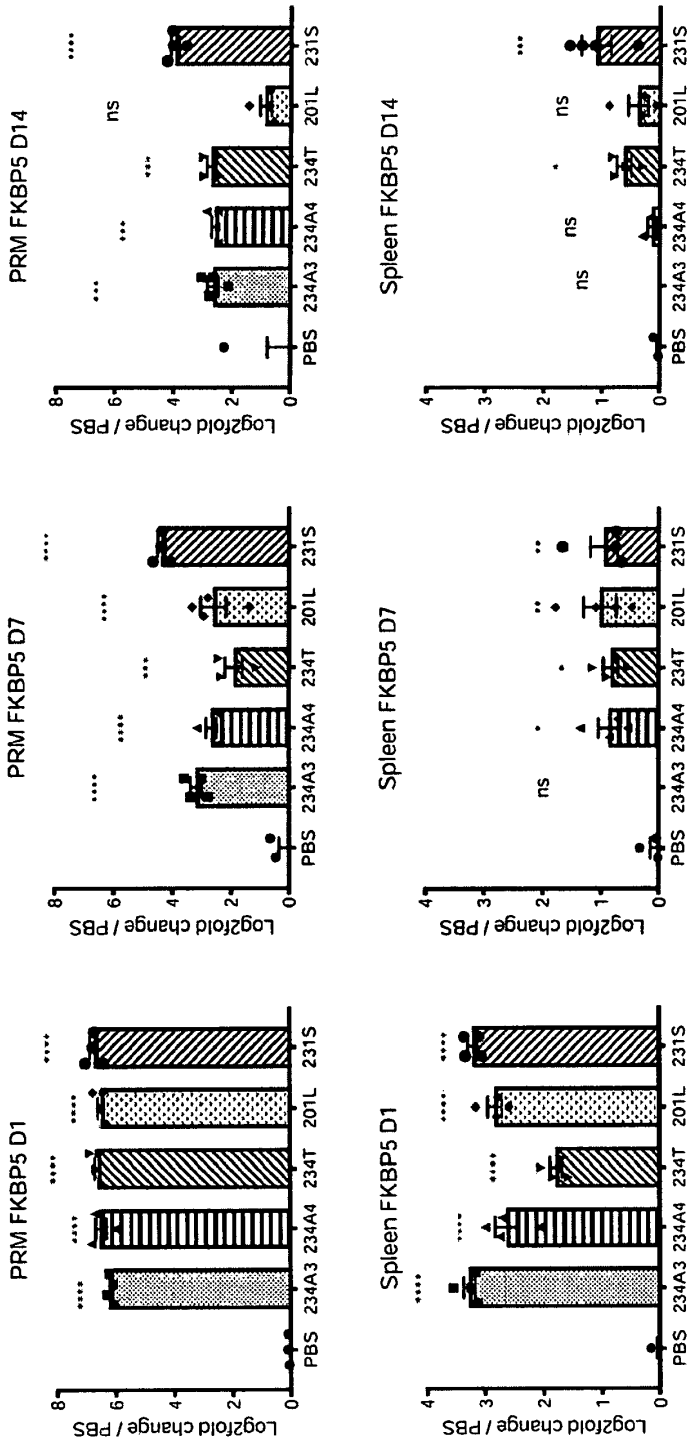


Figure 29: Potency evaluation of GC payloads INX234A3, INX234A4, INX234T, INX201L and INX231S in inducing FKBP5 transcription in peritoneal resident macrophages (upper row) and spleen cells (lower row). ADCs effects were evaluated at 1, 7 and 14 days post 1 single i.p. injection; ADCs were dosed at 0.2mg/Kg of GC payload. FKBP5 expression was measured by quantitative real time PCR and presented as Log2 fold change vs. PBS control group (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group, SEM).

FIG. 30

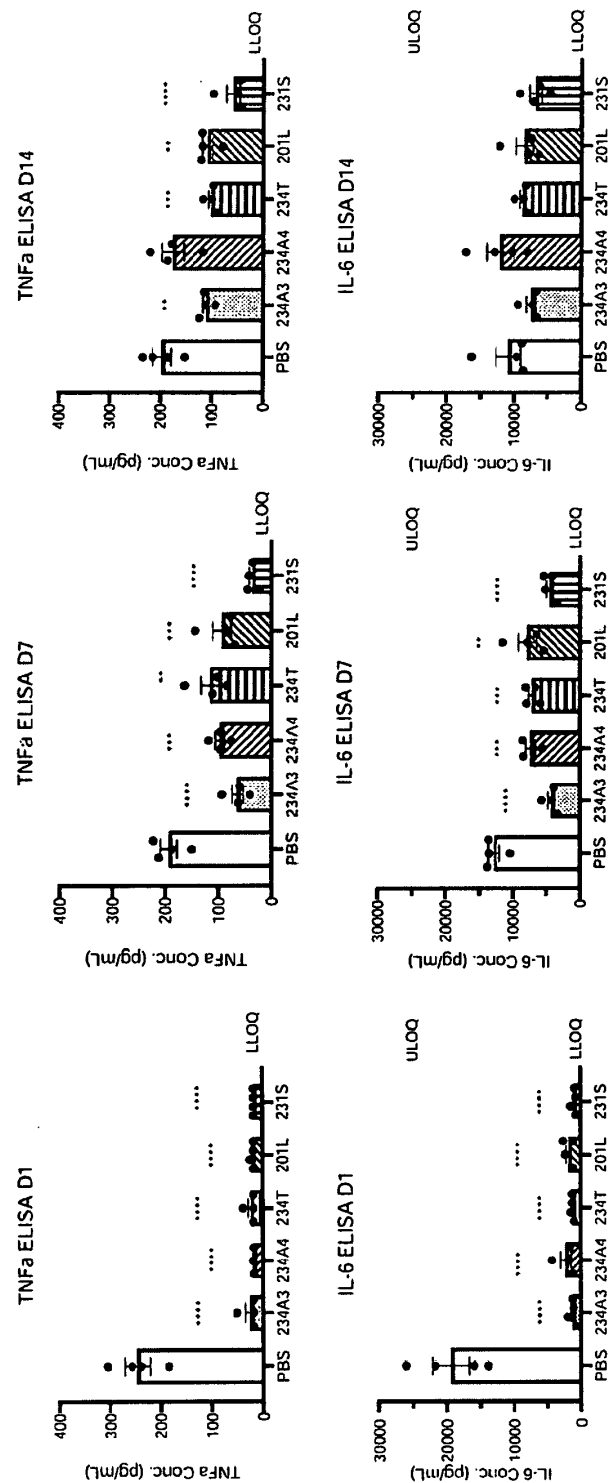


Figure 30: Potency evaluation of GC payloads INX234A3, INX234A4, INX201L and INX231S in preventing *ex vivo* induction of TNFα and IL-6 in PRM. ADCs effects were evaluated at 1, 7 and 14 days post 1 single i.p. injection; ADCs were dosed at 0.2mg/kg of GC payload. Cell supernatants were collected at 24h. TNFα and IL-6 were measured using ELISA (see methods section) (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group, SEM).

FIG. 31



Figure 31: Potency evaluation of GC payloads INX234V, INX234A5 and INX234A11 in inducing FKBP5 transcription in peritoneal resident macrophages. ADCs effects were evaluated at 7 and 14 days post 1 single i.p. injection; ADCs were dosed at 0.2mg/kg of GC payload. FKBP5 expression was measured by quantitative real time PCR and presented as Log2 fold change vs. PBS control group (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group, SEM).

FIG. 32

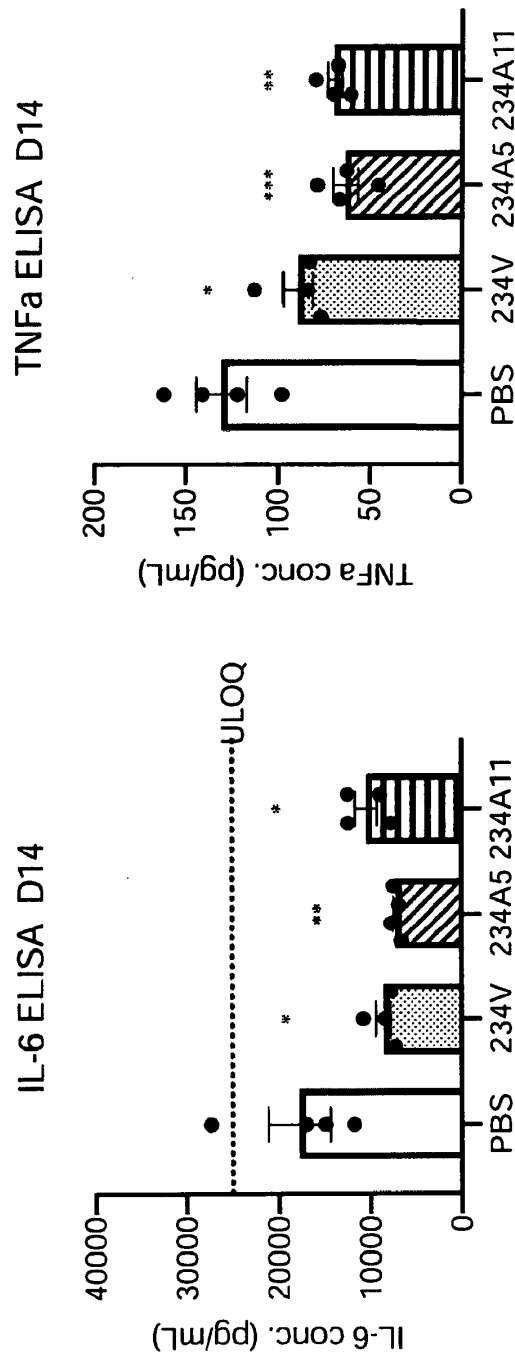


Figure 32: Potency evaluation of GC payloads INX234V, INX234A5 and INX234A11 in preventing *ex vivo* induction of TNF α and IL-6 in PRM. ADCs effects were evaluated at 14 days post 1 single i.p. injection; ADCs were dosed at 0.2mg/Kg of GC payload. Cell supernatants were collected at 24h. TNF α and IL-6 were measured using ELISA (see methods section) (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group, SEM).

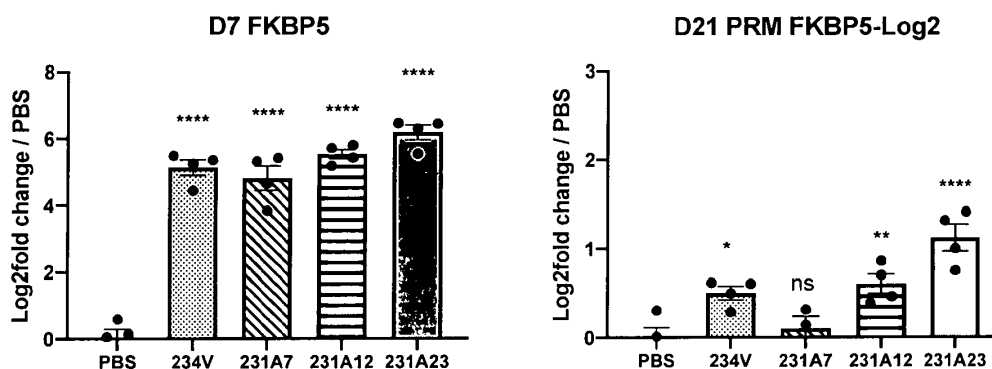
FIG. 33

Figure 33: Potency evaluation of GC payloads INX234V, INX231A7, INX231A12 and INX231A23 in inducing FKBP5 transcription in peritoneal resident macrophages. ADCs effects were evaluated at 7 and 21 days post 1 single i.p. injection; ADCs were dosed at 0.2mg/Kg of GC payload, except for INX231A7 that was dosed at 0.08 mg/Kg of payload. FKBP5 expression was measured by quantitative real time PCR and presented as Log2 fold change vs. PBS control group (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group, SEM).

FIG. 34

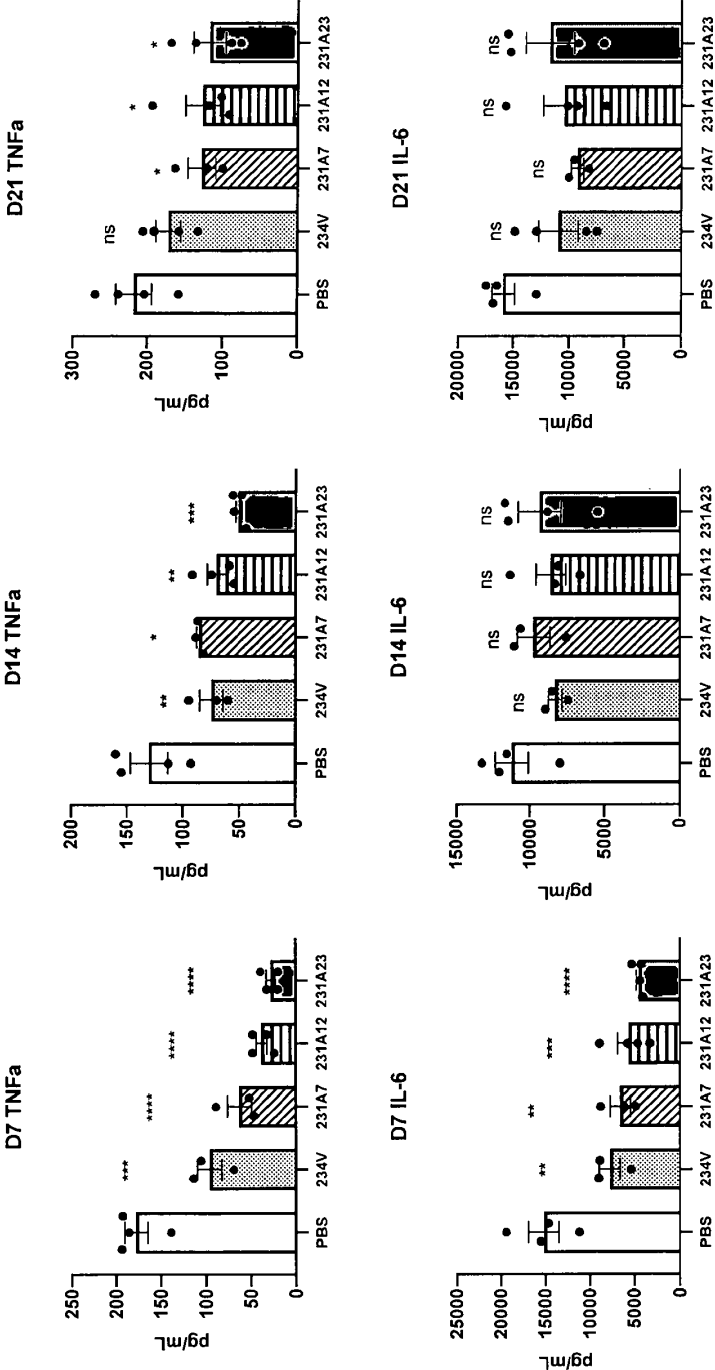


Figure 34: Potency evaluation of GC payloads INX234V, INX231A7, INX231A12 and INX231A23 in preventing *ex vivo* induction of TNFα and IL-6 in PRM. ADCs effects were evaluated at 7, 14 and 21 days post 1 single i.p. injection; ADCs were dosed at 0.2mg/Kg of GC payload. Cell supernatants were collected at 24h. TNFα and IL-6 were measured using ELISA (see methods section) (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group, SEM).

FIG. 35

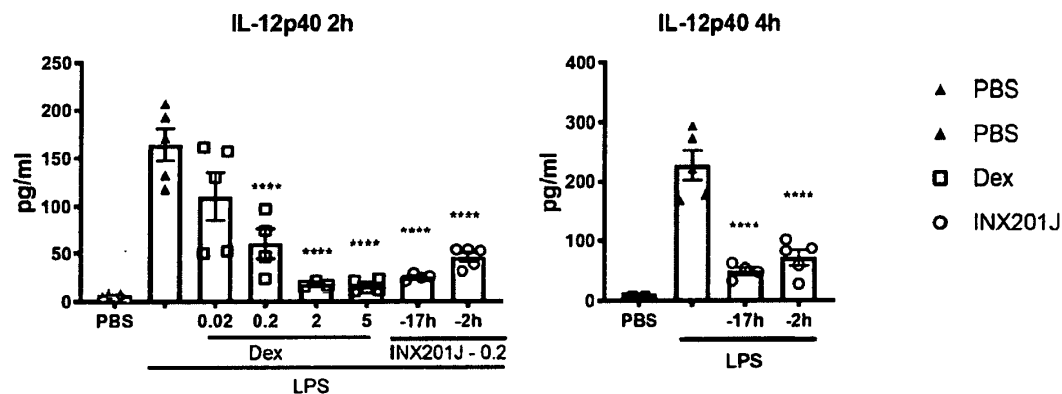


Figure 35: IL-12p40 changes at 2 (left) and 4h (right) post LPS in peripheral blood. Plasma concentrations measured using a mouse multi-plex; Dosing: Dex (square) was dosed 2h before LPS stimulation at 0.02, 0.2, 2 and 5 mg/Kg, INX201J (circle) was dosed 2 or 17h before LPS injection at 10 mg/Kg providing 0.2 mg/Kg of GC. The PBS only group (grey solid triangle) indicates the baseline cytokine level in the absence of stimulation; PBS + LPS (black solid triangle) (SEM; n=5/group except where technical failures are excluded from analysis; ordinary one-way ANOVA as compared to PBS + LPS group).

FIG. 36

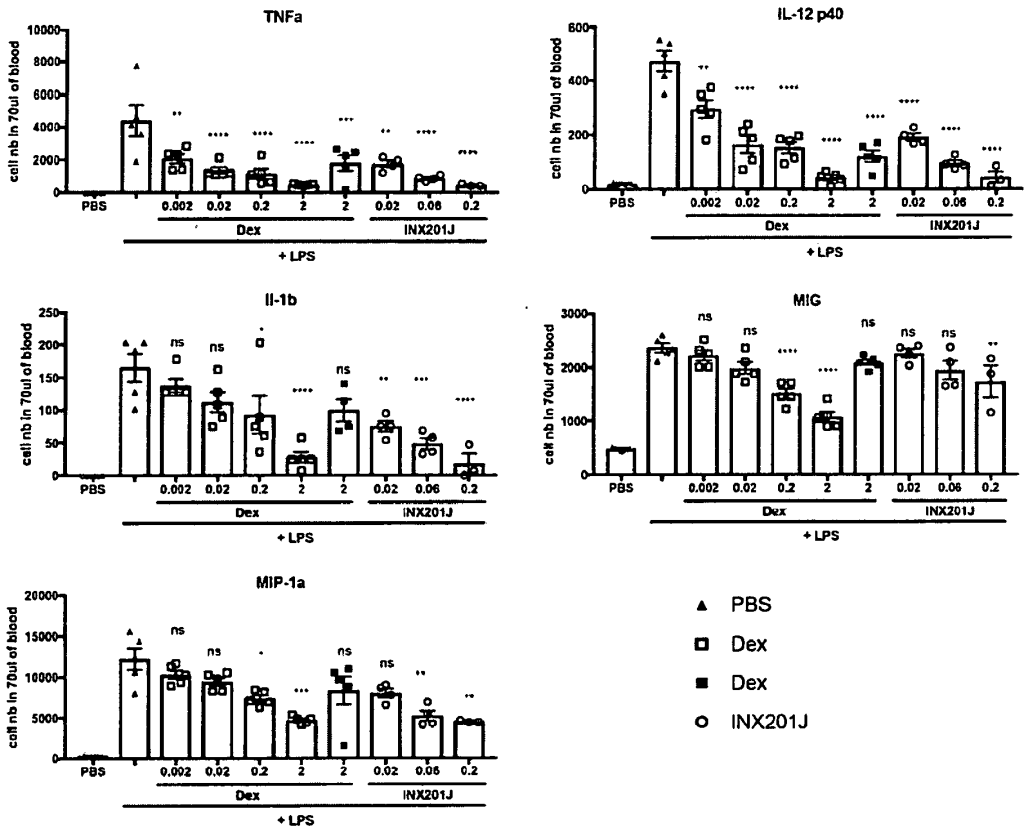


Figure 36: Cytokine changes at 2h post LPS in peripheral blood. Plasma concentrations measured using a mouse 5-plex; Dosing: Dex was dosed 2h before LPS stimulation at 0.002, 0.02, 0.2, 2 mg/Kg (square) or at 2mg/Kg 17h pre LPS (black solid square), INX201J (circle) was dosed 17h before LPS injection at 0.02, 0.06, 0.2 mg/Kg of GC payload. The PBS only group (solid grey triangle) indicates the baseline cytokine level in the absence of stimulation; PBS + LPS (solid black triangle) (SEM; n=5/group, except where technical failures are excluded from analysis; ordinary one-way ANOVA as compared to PBS + LPS group).

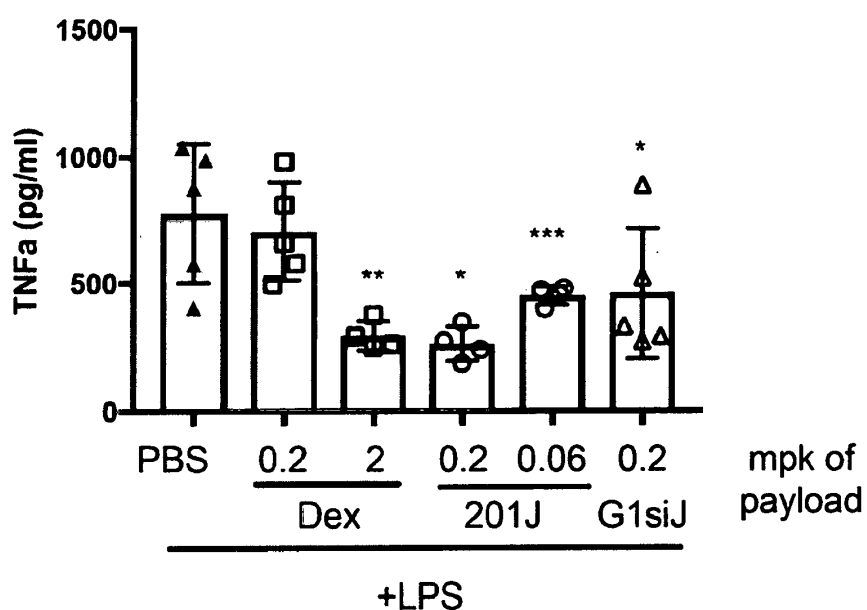
FIG. 37

Figure 37: TNFα changes at 2h post LPS in peripheral blood. TNFα plasma concentrations measured using ELISA; Dosing: Dex was dosed 2h before LPS stimulation at 0.2 and 2 mg/Kg (square), INX201J (circle) was dosed 17h before LPS injection at 0.06 and 0.2 mg/Kg of GC payload. The PBS group (solid black triangle) received PBS at 2h pre LPS. IgG1siJ (G1siJ) group (triangle) received human IgG1 silent conjugated to GC at 0.2 mg/Kg of payload 17h pre LPS. (SEM; n=5/group except where technical failures are excluded from analysis; ordinary one-way ANOVA as compared to PBS group).

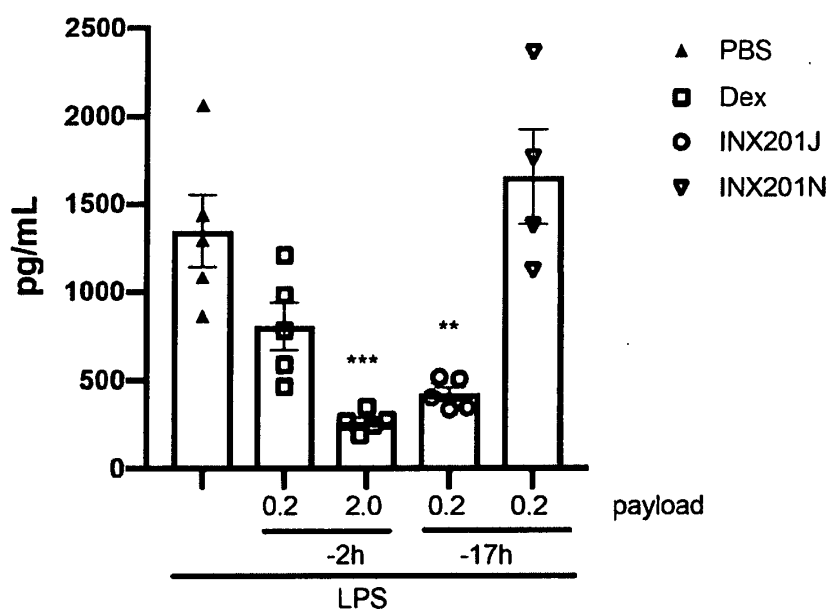
FIG. 38

Figure 38 TNFα changes at 2h post LPS in peripheral blood. TNFα plasma concentrations were measured by ELISA; Dosing: Dex was dosed 2h before LPS stimulation at 0.2 and 2 mg/Kg (square), INX201J (circle) and INX201N (inverted triangle) was dosed 17h before LPS injection at 0.2 mg/Kg of GC payload. The PBS group received PBS at 2h pre LPS (solid black triangle). (SEM; n=5/group except where technical failures are excluded from analysis; ordinary one-way ANOVA as compared to PBS group).

FIG. 39

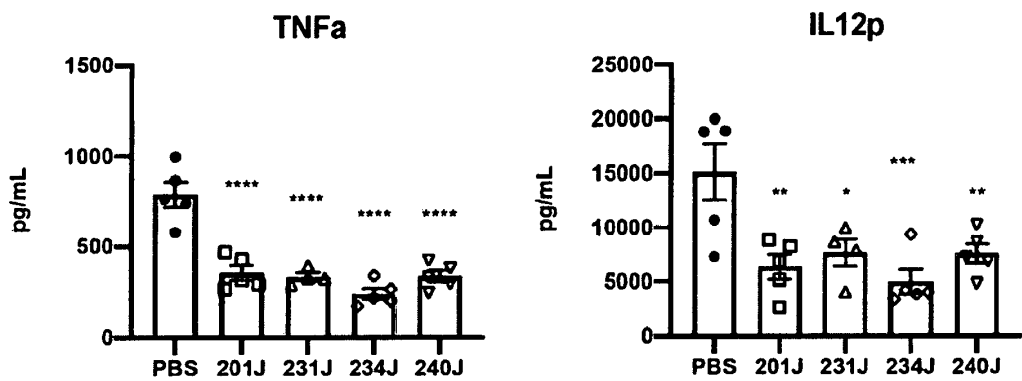


Figure 39: TNFα (left) and IL-12p40 (right) changes at 2h post LPS in peripheral blood. Cytokine plasma concentrations were measured by ELISA; Dosing: PBS (solid circle), INX201J (square), INX231J (triangle), INX234J (lozenge), and INX201P (inverted triangle) were dosed 17h before LPS injection, at 0.2 mg/Kg of GC payload (SEM; n=5/group; ordinary one-way ANOVA as compared to PBS group).

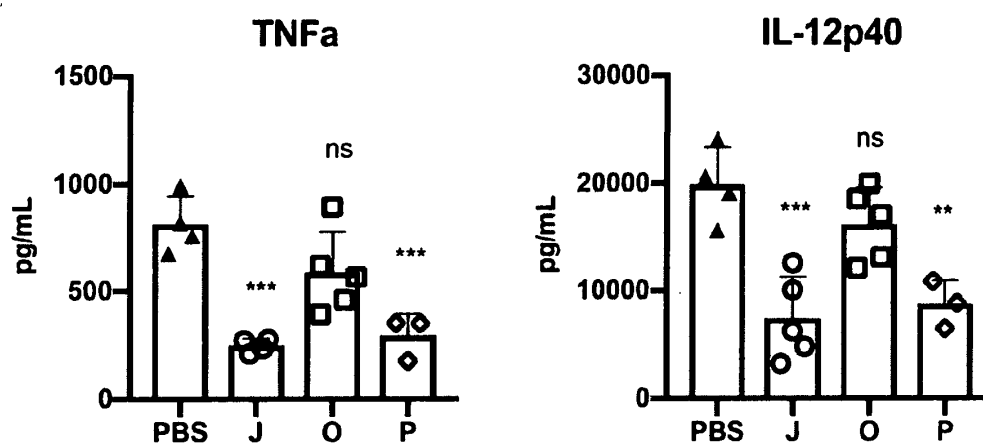
FIG. 40

Figure 40: TNFα (left) and IL-12p40 (right) changes at 2h post LPS in peripheral blood. Cytokine plasma concentrations were measured by ELISA; Dosing: PBS (solid triangle), INX201J (circle), INX201O (square) and INX201P (lozenge) were dosed 17h before LPS injection at 0.2 mg/Kg of GC payload (SEM; n=5/group except where technical failures are excluded from analysis; ordinary one-way ANOVA as compared to PBS group).

FIG. 41

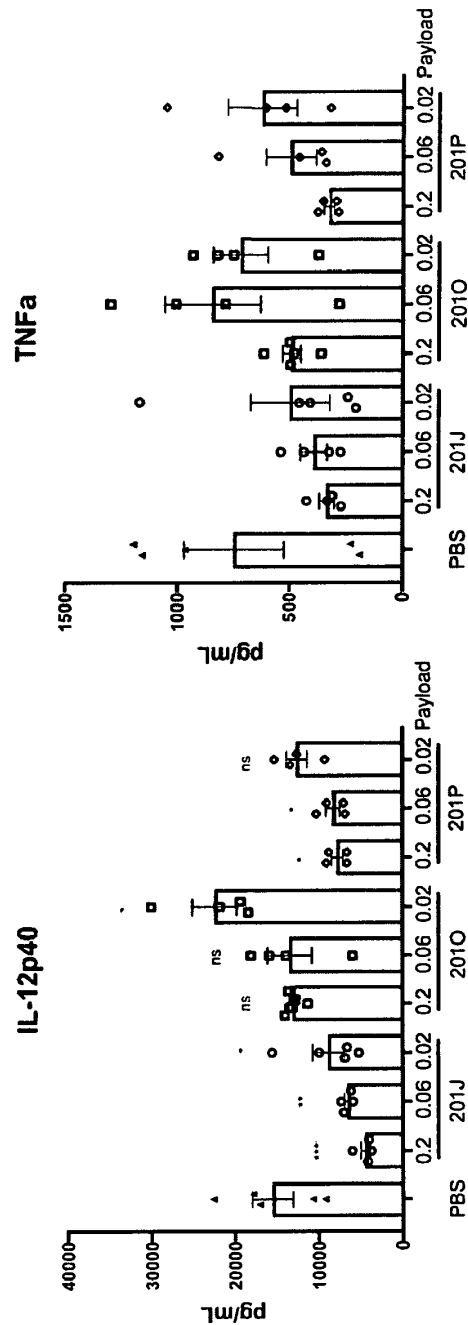


Figure 41: TNFα (right) and IL-12p40 (left) changes at 2h post LPS in peripheral blood. Cytokine plasma concentrations were measured by ELISA; Dosing: PBS, INX201J (circle), INX201O (square) and INX201P (lozenge) were dosed 17h before LPS injection at 0.2 mg/kg of GC payload (SEM; n=5/group except where technical failures are excluded from analysis; ordinary one-way ANOVA as compared to PBS group (solid black triangle)).

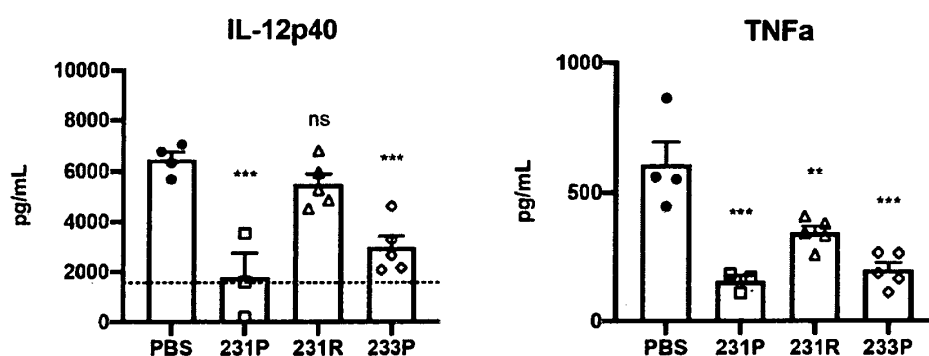
FIG. 42

Figure 42: TNFα (right) and IL-12p40 (left) changes at 2h post LPS in peripheral blood. Cytokine plasma concentrations were measured by ELISA; all ADCs and PBS were dosed 20h before LPS injection, at 0.2 mg/Kg of GC payload (INX231P (square), INX231R (triangle), INX233P (lozenge))(SEM; n=5/group except where technical failures are excluded from analysis; ordinary one-way ANOVA as compared to PBS group (solid circle)).

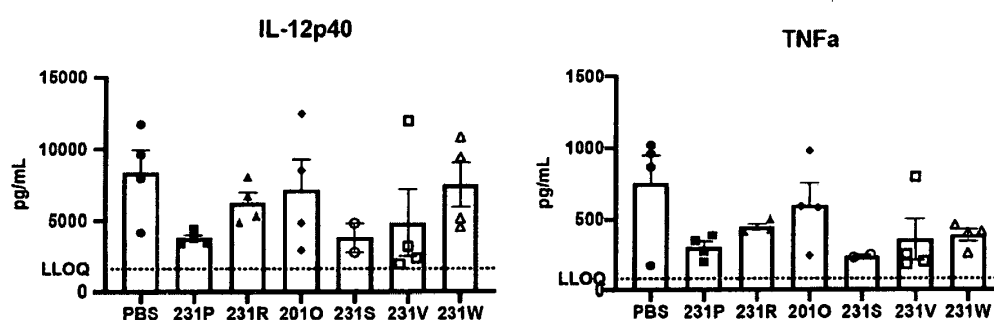
FIG. 43

Figure 43: TNFα (right) and IL-12p40 (left) changes at 2h post LPS in peripheral blood. Cytokine plasma concentrations were measured by ELISA; all ADCs and PBS were dosed 20h before LPS injection, at 0.2 mg/Kg of GC payload (INX231P (solid square), INX231R (solid triangle), INX201O (solid lozenge), INX231S (circle), INX231V (square), INX231W (triangle)) (SEM; n=4/group except for INX231S where 2 technical failures were excluded from analysis; ordinary one-way ANOVA as compared to PBS group (solid circle) showed non-significant data).

FIG. 44

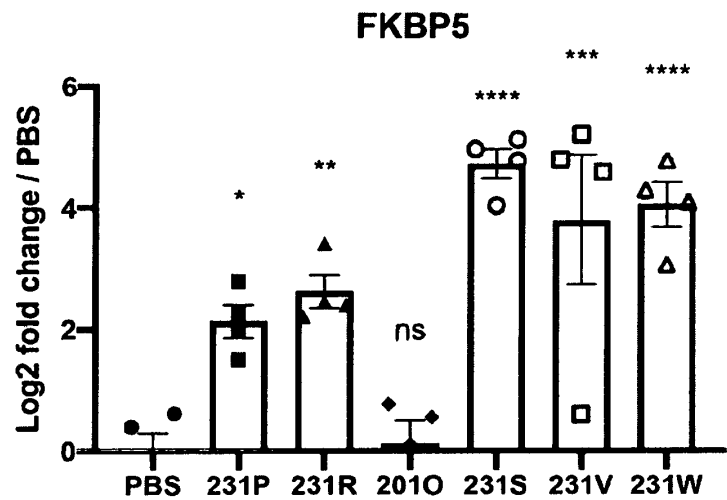


Figure 44: FKBP5 transcriptional activation following ADCs treatment in peritoneal resident 4 days post ADC treatment. ADCs were injected i.p. on day 0 delivering 0.2 mg/Kg of GC payload each; PRM were isolated on day 3. FKBP5 transcription levels were measured by real time PCR and presented as Log2 fold change vs. PBS control group (SEM, ordinary one-way ANOVA as compared to PBS group, n=4).

FIG. 45



Figure 45: TNFα (right) and IL-12p40 (left) changes at 2h post LPS in peripheral blood. Cytokine plasma concentrations were measured by ELISA; all ADCs and PBS were dosed 20h before LPS injection, at 0.2 mg/kg of GC payload (SEM; n=5/group except for INX234P, INX234A4 and INX234T for which 1 technical failure per group was recorded; ordinary one-way ANOVA as compared to PBS group).

FIG. 46

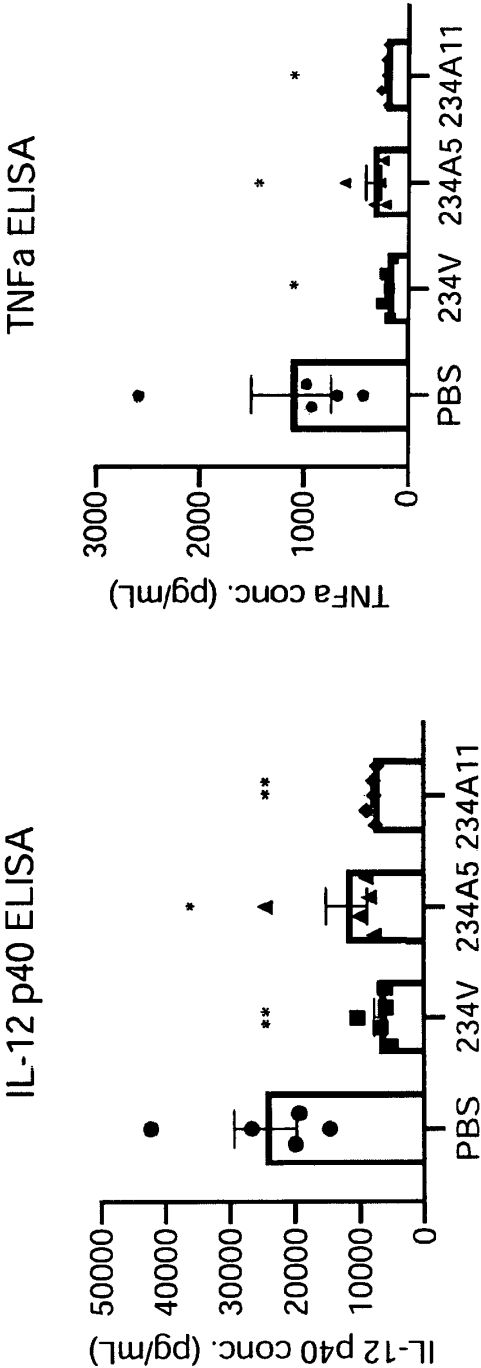


Figure 46: TNFα (right) and IL-12p40 (left) changes at 2h post LPS in peripheral blood. Cytokine plasma concentrations were measured by ELISA; all ADCs and PBS were dosed 20h before LPS injection, at 0.2 mg/Kg of GC payload (INX234V (solid square), INX234A5 (solid triangle), INX234A11 (solid lozenge))(SEM; n=5/group ex; ordinary one-way ANOVA as compared to PBS (solid circle) group).

FIG. 47

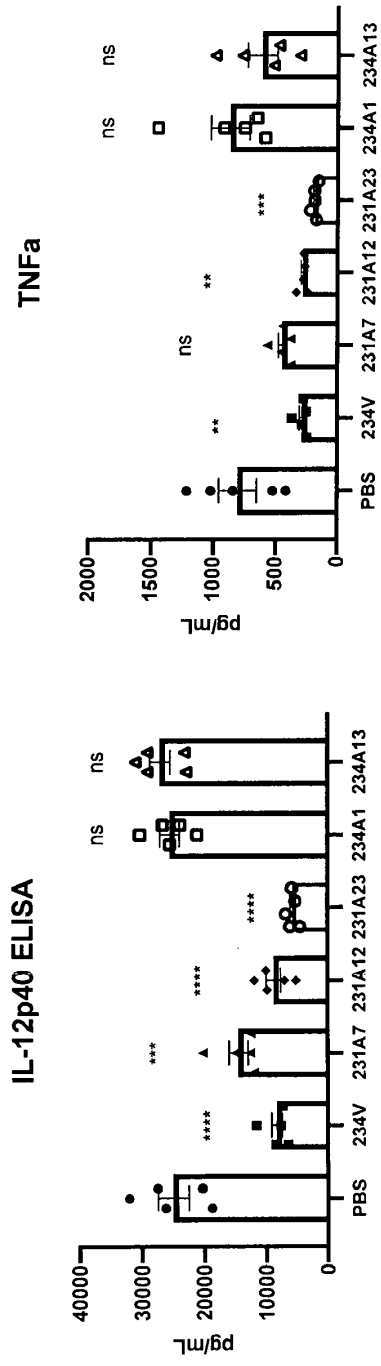


Figure 47: TNFα (right) and IL-12p40 (left) changes at 2h post LPS in peripheral blood. Cytokine plasma concentrations were measured by ELISA; all ADCs and PBS were dosed 20h before LPS injection, at 0.2 mg/Kg of GC payload except for INX231A7 that was dosed at 0.08 mg/Kg of payload (INX234V (solid square), INX231A7 (solid triangle), INX231A12 (solid lozenge), INX231A23 (circle), INX234A1 (square), INX234A13 (triangle)) (SEM; n=5/group; ordinary one-way ANOVA as compared to PBS group).

FIG. 48

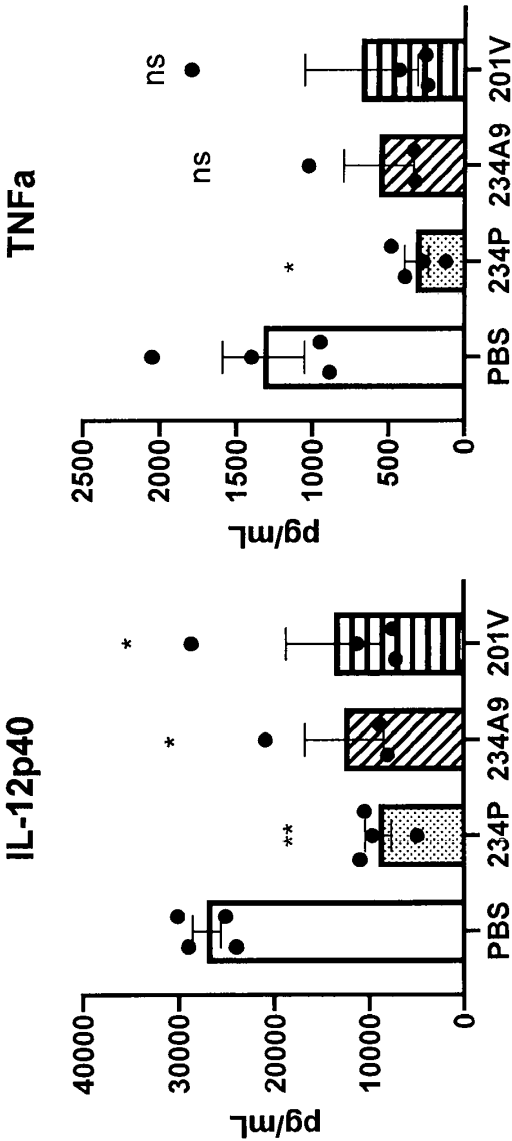


Figure 48: TNFα (right) and IL-12p40 (left) changes at 2h post LPS in peripheral blood. Cytokine plasma concentrations were measured by ELISA; all ADCs and PBS were dosed 20h before LPS injection, at 0.2 mg/Kg of GC payload (SEM; n=5/group except but 1 sample had to be censored in the PBS, INX234P, INX201V groups and 2 in the INX234A9 group for technical reason, ordinary one-way ANOVA as compared to PBS group).

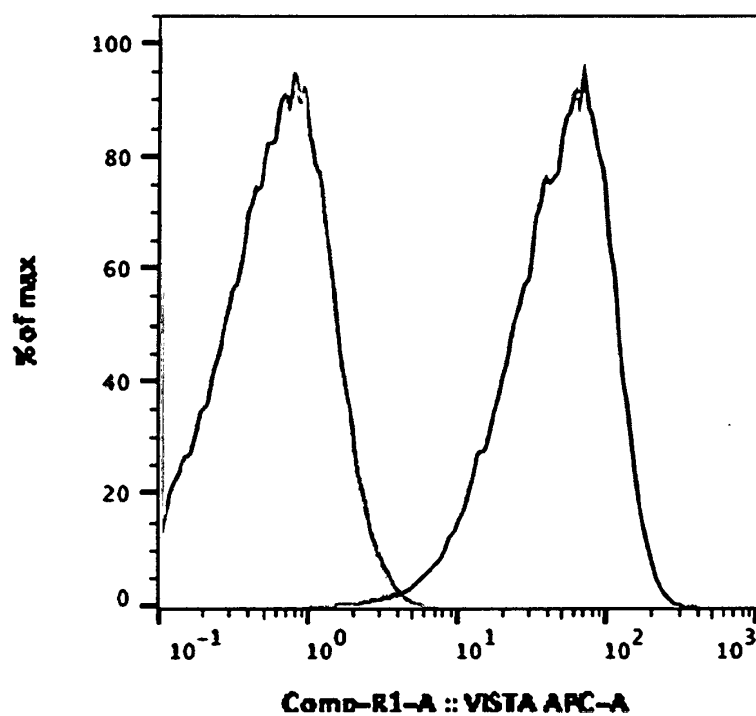
FIG. 49

Figure 49: VISTA is highly expressed in liver endothelial cells. CD45-CD31+ non-immune endothelial cells isolated from hVISTA knock-in mouse liver and stained with anti-human VISTA (red line, shifted right) or unstained (solid gray).

FIG. 50

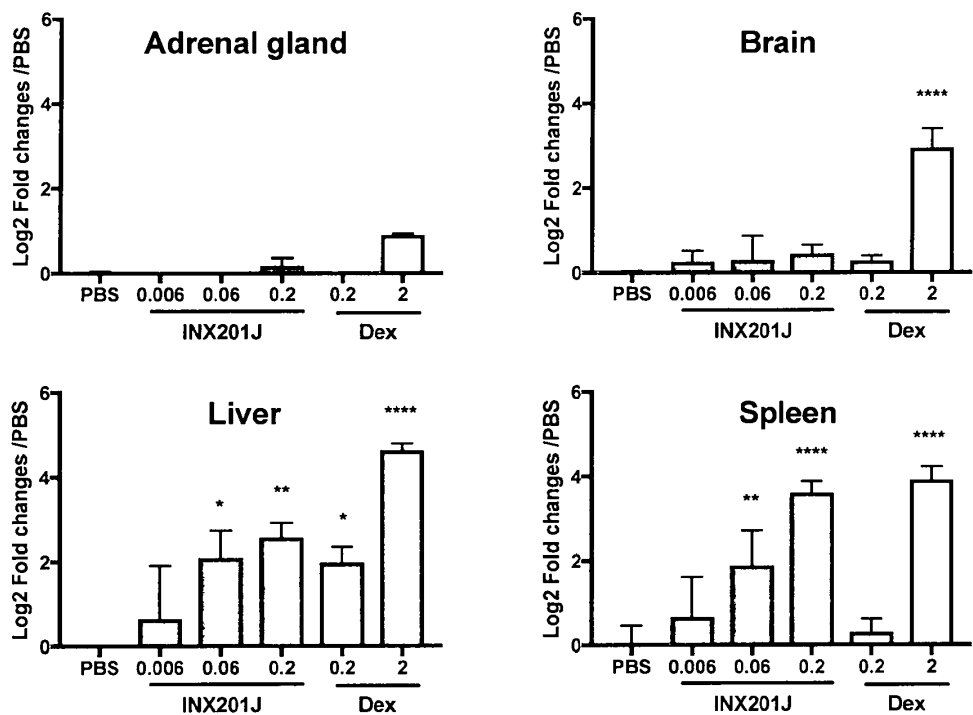


Figure 50: FKBP5 transcriptional activation following INX201J injection in adrenal gland, brain, liver and spleen. INX201J effects (red) were measured at 20h post 1 single i.p. injection at 0.3, 3, 10 mg/Kg (delivering 0.006, 0.06, and 0.2 mg/Kg of payload, respectively). Dex effects (blue) were measured 2h post a single i.p. injection at 0.2 or 2mg/Kg. FKBP5 transcription levels were measured by real time PCR and presented as Log2 fold change vs. the mean of the PBS control group. (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group, SD)

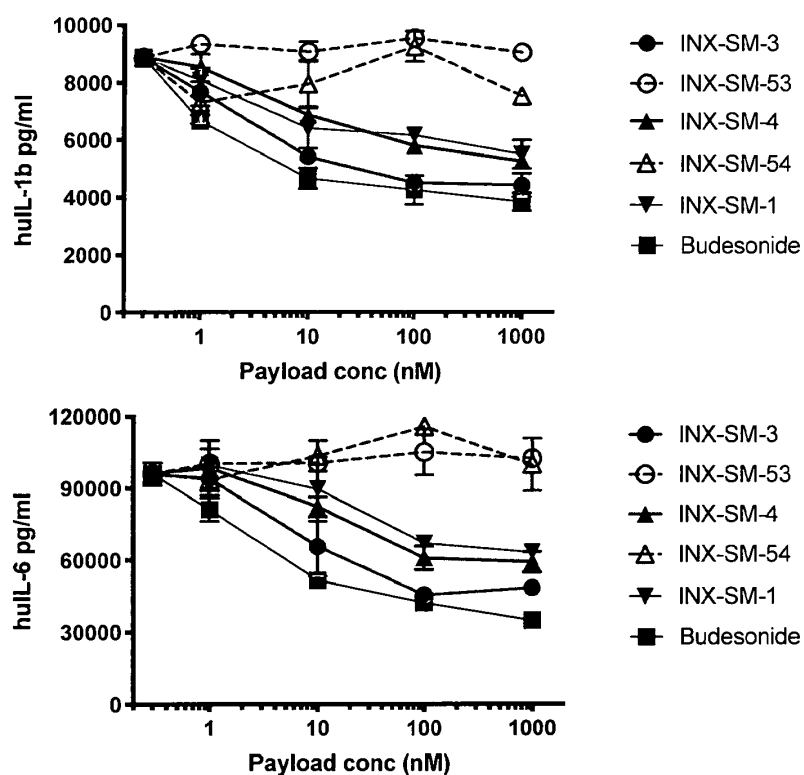
FIG. 51

Figure 51: INX-SM-3, INX-SM-4, and INX-SM-1 inhibit IL-1 β (left) and IL-6 (right) production. Cytokine levels were measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 1nM) of steroid payloads, with the no treatment control plotted on the log-scale x-axis at <1nM; n=1 donor, standard deviation plotted from technical duplicates.

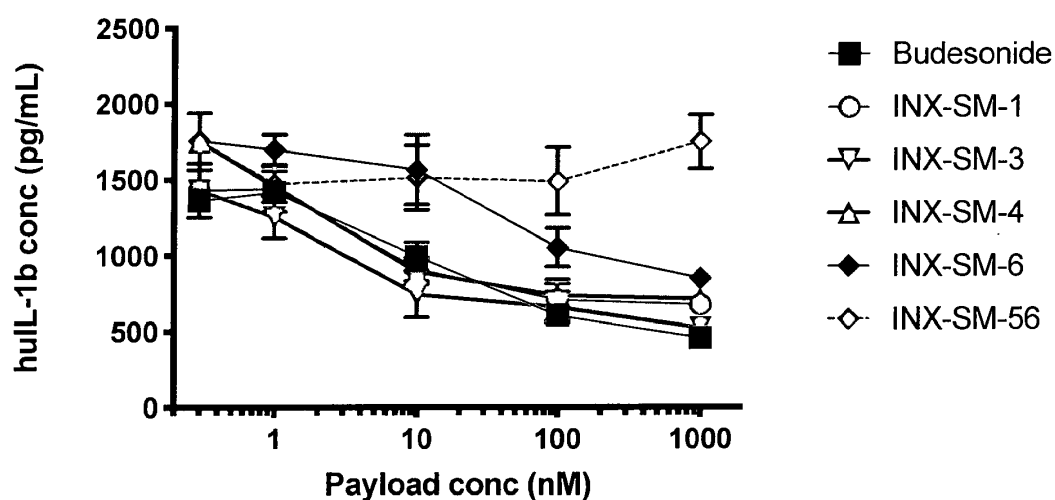
FIG. 52

Figure 52: INX-SM-1, INX-SM-3, INX-SM-4 and INX-SM-6 inhibit IL-1 β production. Cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 1nM) of steroid payloads, with the no treatment control plotted on the log-scale x-axis at <1nM; n=1 donor, standard deviation plotted from technical duplicates.

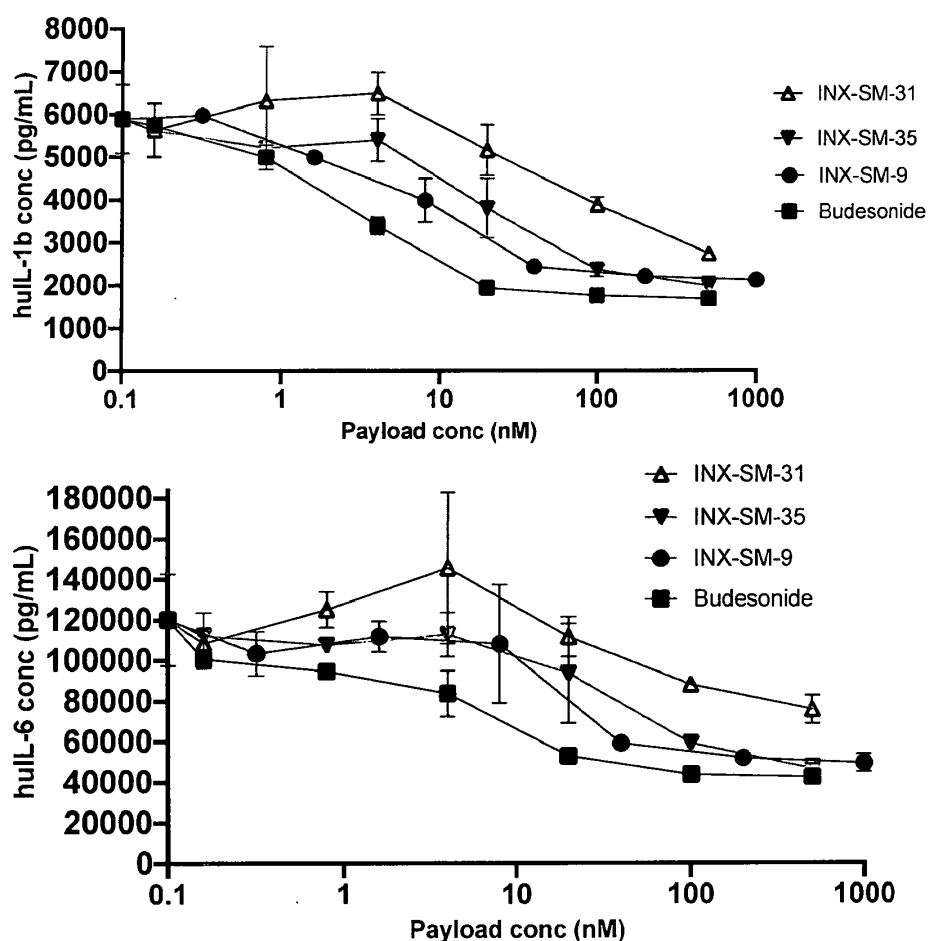
FIG. 53

Figure 53: INX-SM-9, INX-SM-31 and INX-SM-35 inhibit IL-1 β (top) and IL-6 (bottom) production. Cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.2nM) of steroid payloads, with the no treatment control plotted on the log-scale x-axis at <0.2nM; n=2 donors-representative donor shown. Standard deviation plotted from technical duplicates.

FIG. 54

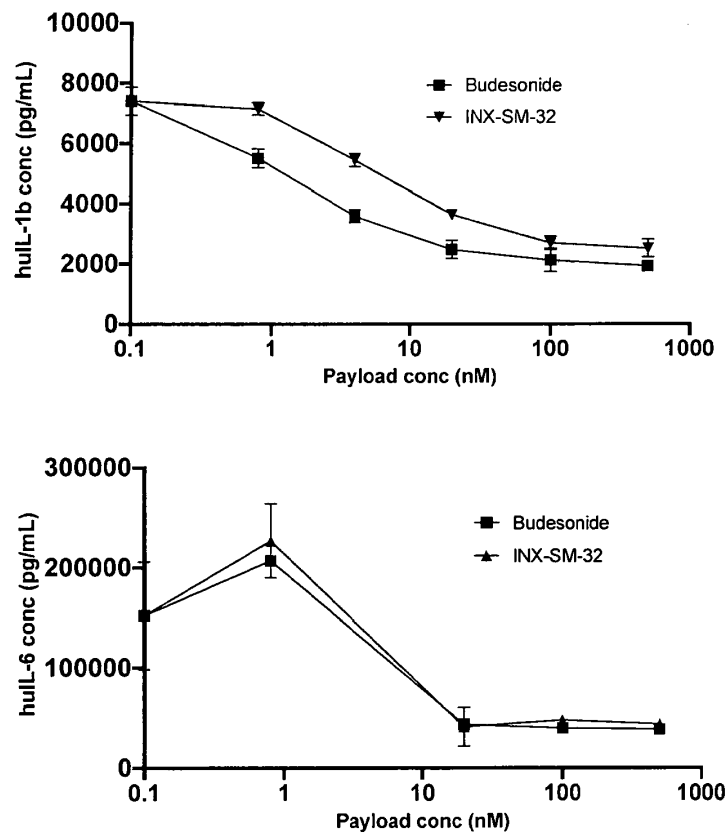


Figure 54: INX-SM-32 inhibits IL-1 β (top) and IL-6 (bottom) production. Cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (500 – 1nM) of steroid payloads, with the no treatment control plotted on the log-scale x-axis at <1nM; n=2. Representative donor shown. Standard deviation plotted from technical duplicates.

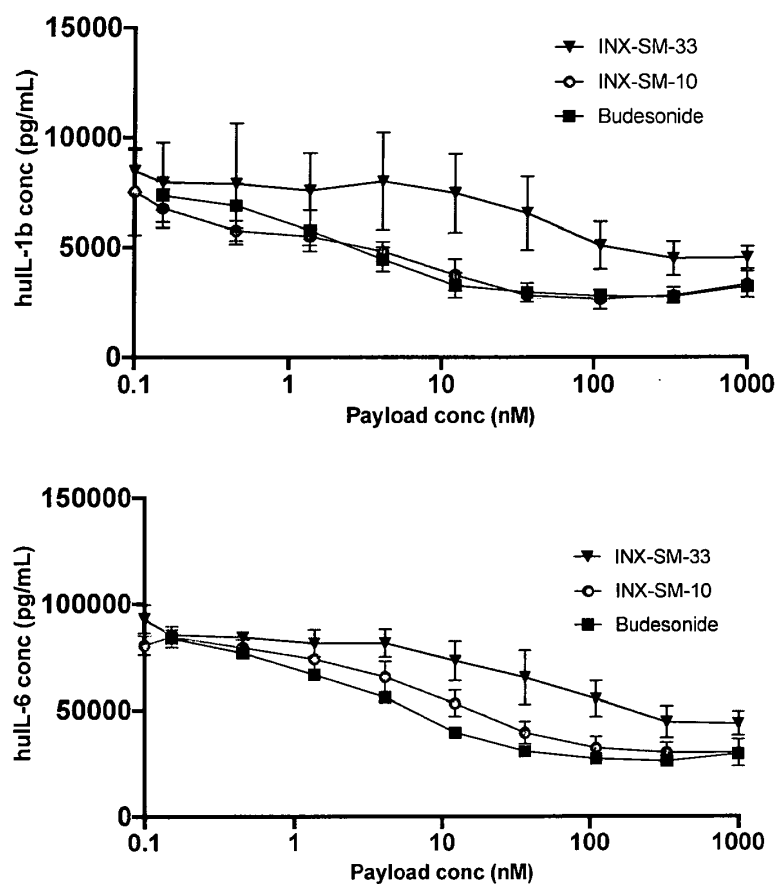
FIG. 55

Figure 55: INX-SM-10 shows robust inhibition in IL-1 β (top) and IL-6 (bottom) production. INX-SM-33 demonstrated modest inhibition of cytokine production. Cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.5nM) of steroid payloads, with the no treatment control plotted on the log-scale x-axis at <0.5nM; n=1 donor, standard deviation plotted from technical duplicates

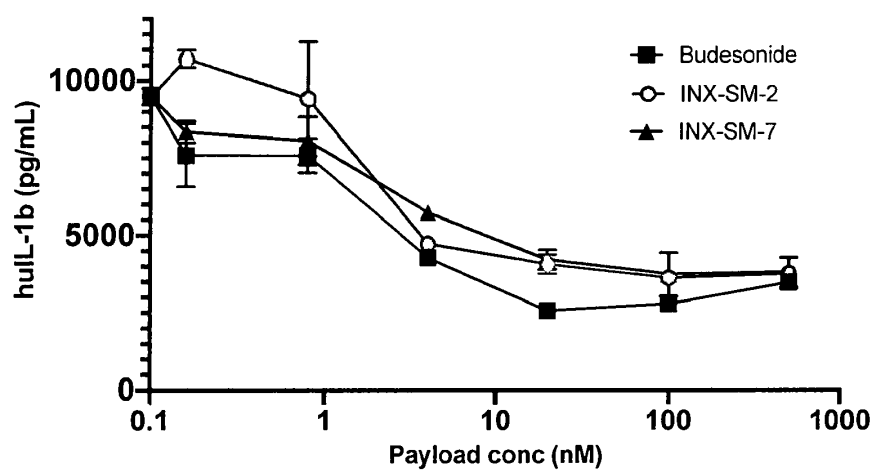
FIG. 56

Figure 56: INX-SM-2 and INX-SM-7 show inhibition in IL-1 β . Average Cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.16nM) of steroid payloads, with the no treatment control plotted on the log-scale x-axis at <0.16nM; n=1, standard deviation plotted from technical duplicates

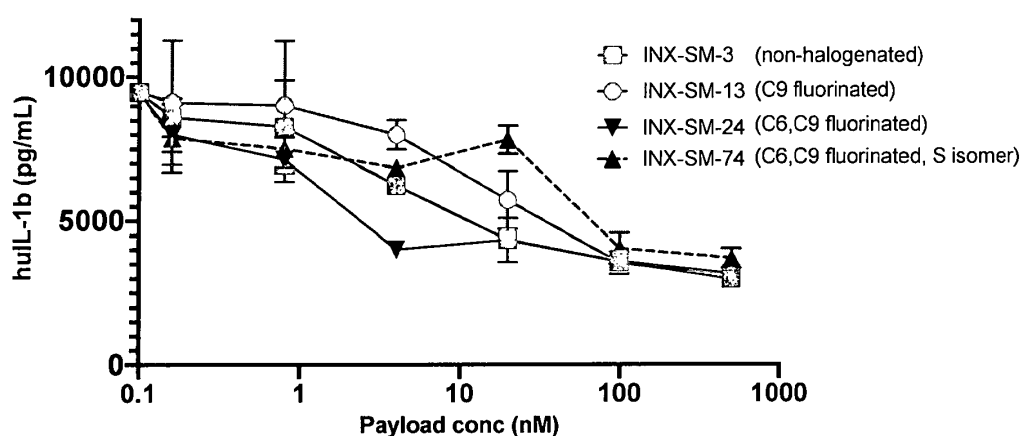
FIG. 57

Figure 57: Halogenation at both C6 and C9, but not C9 alone provides increased potency.
Average cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.16nM) of steroid payloads, with the no treatment control plotted on the log-scale x-axis at <0.16nM; n=1, standard deviation plotted from technical duplicates.

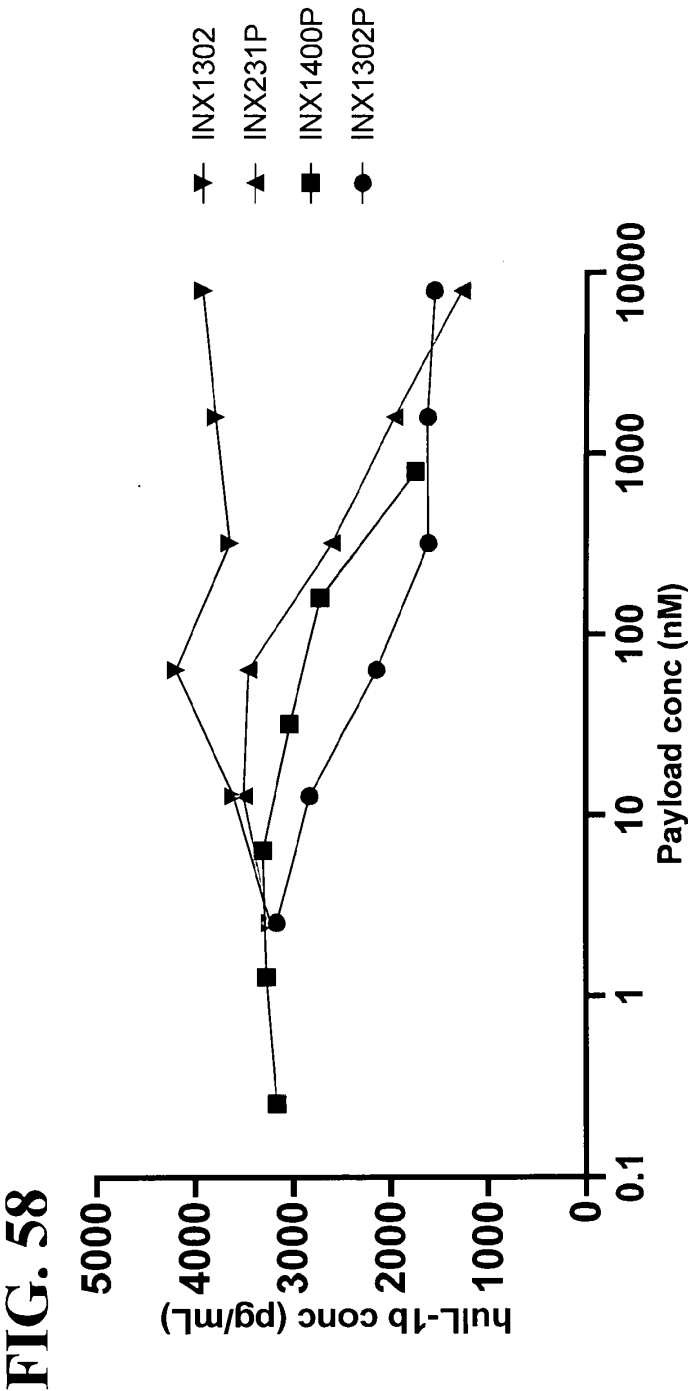


Figure 58: INX P conjugated antibodies directed against other surface targets retain anti-inflammatory effects of anti-VISTA conjugates. Average cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (8,000 – 0.26nM conjugated payload) of glucocorticoid conjugates; n=1, mean of technical duplicates.

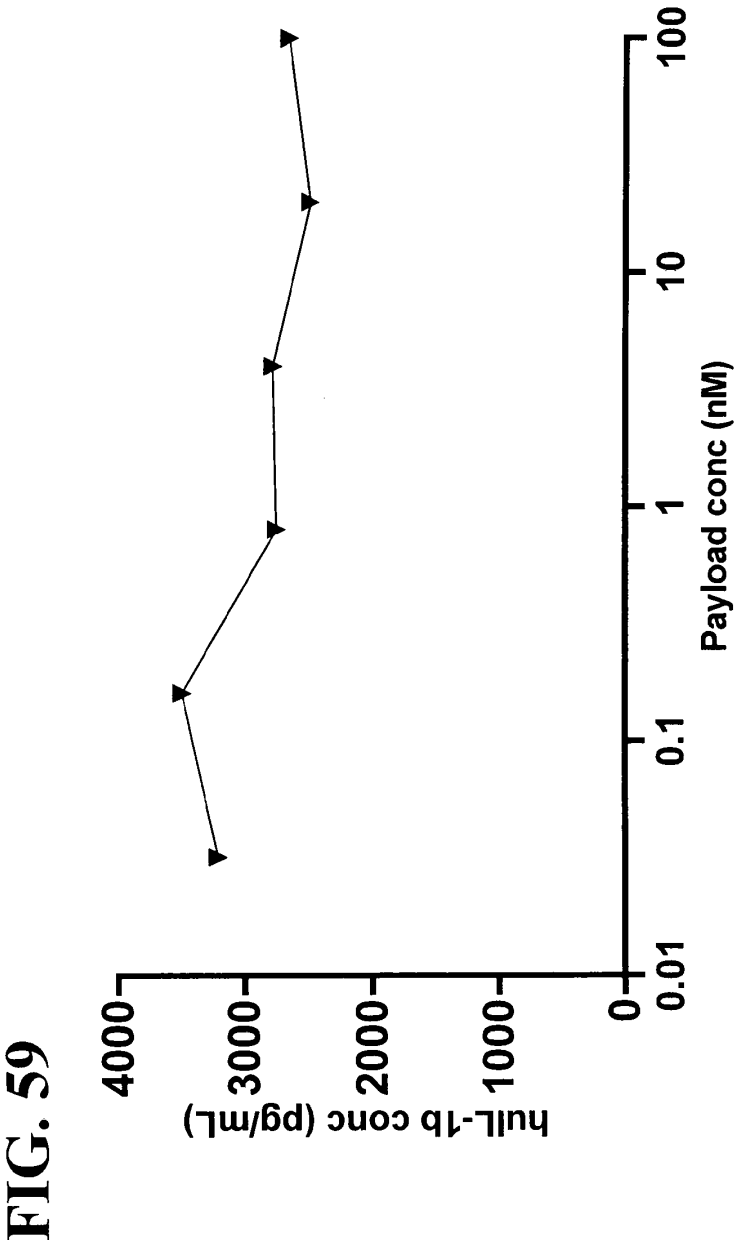


Figure 59: INX-SM-43 shows moderate inhibition of hUL1-β. Average cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (100 – 0.032nM) of glucocorticoid payloads; n=1, mean of technical duplicates.

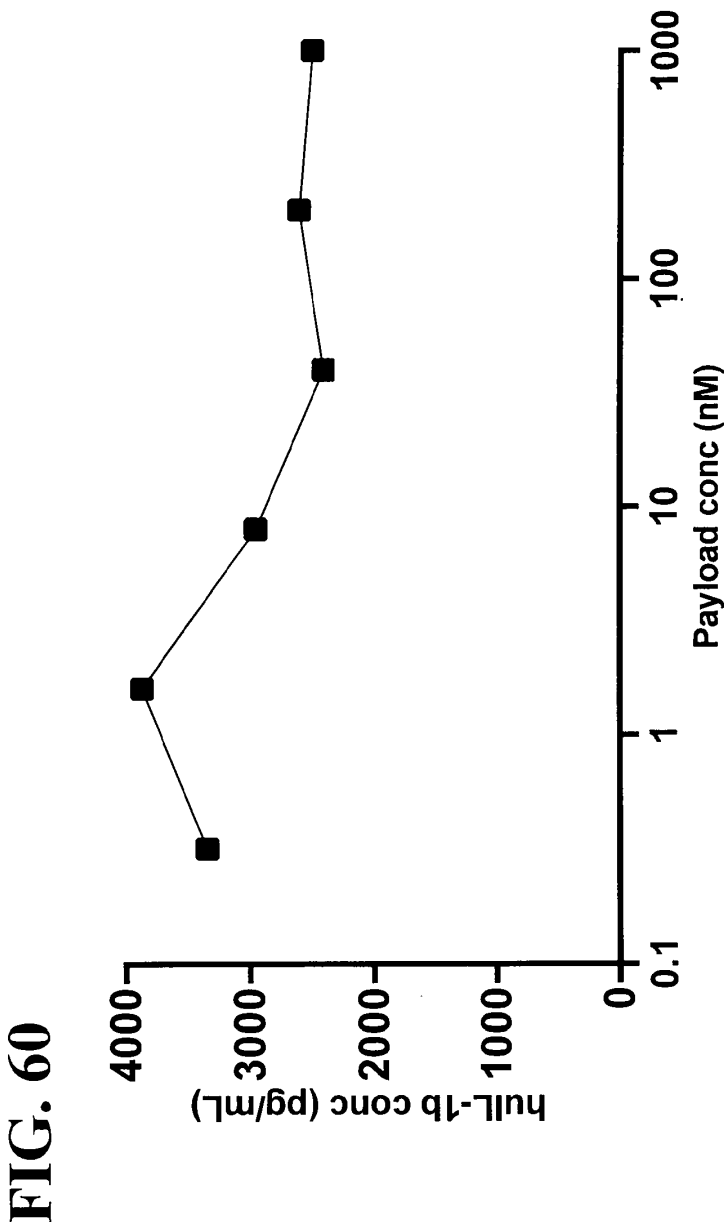


Figure 60: INX-SM-44 shows moderate inhibition of huIL1- β . Average cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.32nM) of glucocorticoid payloads; n=1, mean of technical duplicates.

FIG. 61

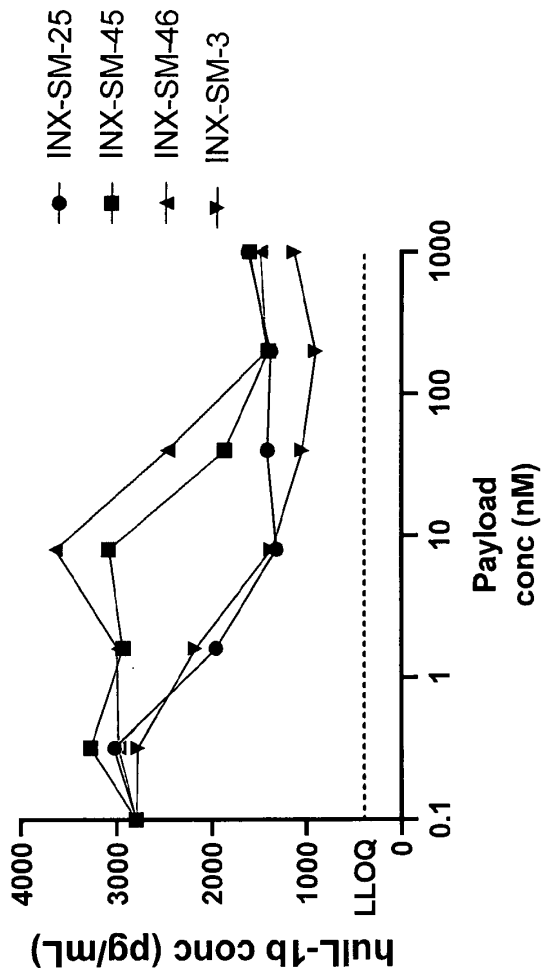


Figure 61: INX-SM-25 and INX-SM-3 show robust inhibition in IL-1 β production. INX-SM-45 and INX-SM-46 demonstrated more modest inhibition of cytokine production. Cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.5nM) of steroid payloads, with the no treatment control plotted on the log-scale x-axis at <0.5nM; n=1 donor, mean of technical duplicates plotted.

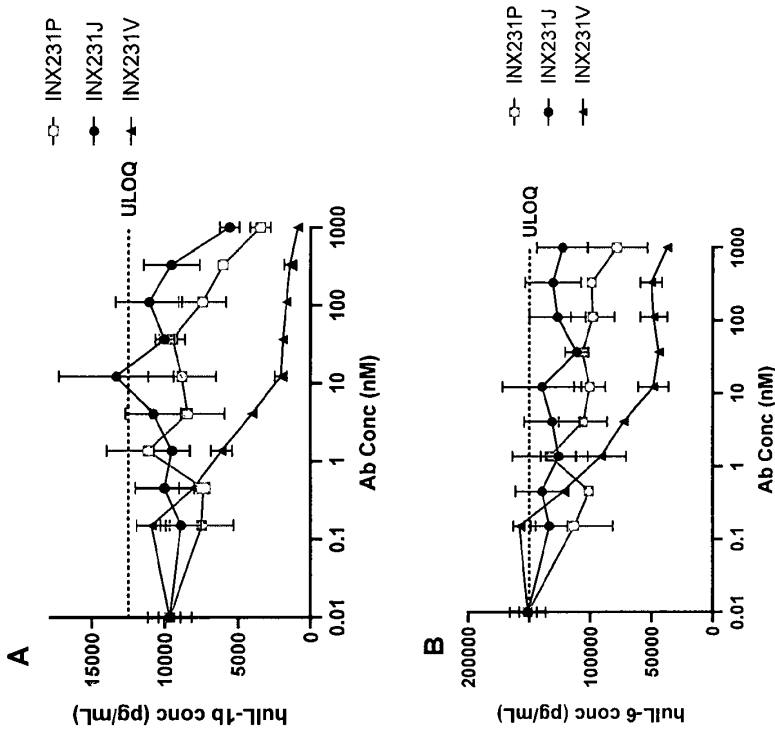


Figure 62: Dramatically increased potency of INX231V over INX231P and INX231J. Average cytokine levels for A. hull-1 β . B. hull-6 measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.16nM) of conjugated steroid linker payloads, with the no treatment control plotted on the log-scale x-axis at <0.16nM; n=1, standard deviation plotted from technical duplicates. Values above the ULOQ (12,500pg/mL for IL-1 β and 150,000pg/mL for IL-6) were plotted as the extrapolated value.

FIG. 63

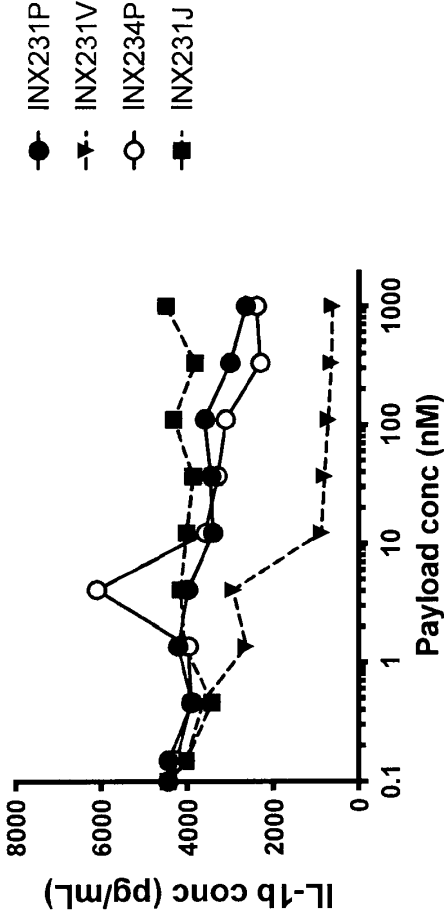


Figure 63: INX231V has substantial potency, and INX231P modest potency over INX231J. Average cytokine levels for IL-1 β measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.16nM) of conjugated steroid linker payloads, with the no treatment control plotted on the log-scale x-axis at <0.16nM; n=1, mean plotted of technical duplicates.

FIG. 64

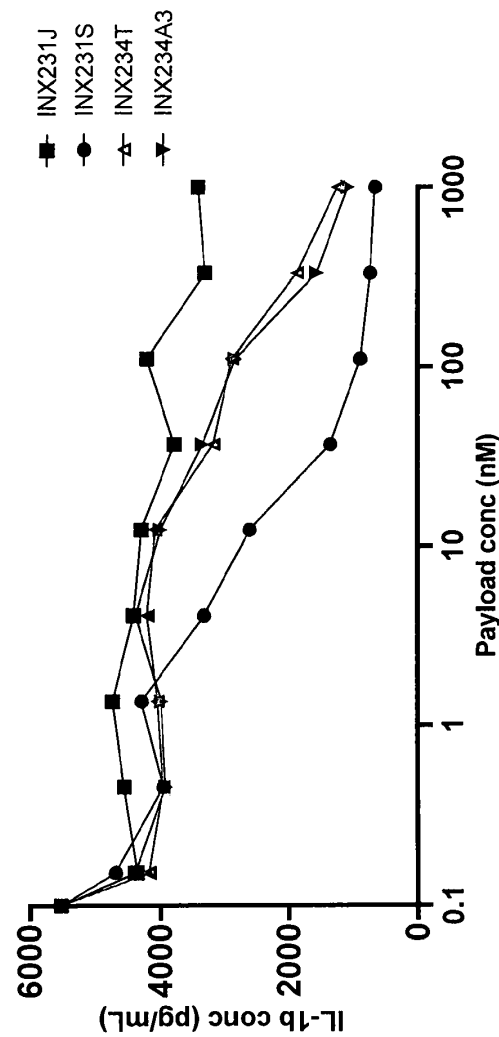


Figure 64: Enhanced potency of INX231S, INX234T and INX234A3 over INX231J. Average cytokine levels for IL-1 β measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.16nM) of conjugated steroid linker payloads, with the no treatment control plotted on the log-scale x-axis at <0.16nM; n=1, mean plotted of technical duplicates.

FIG. 65

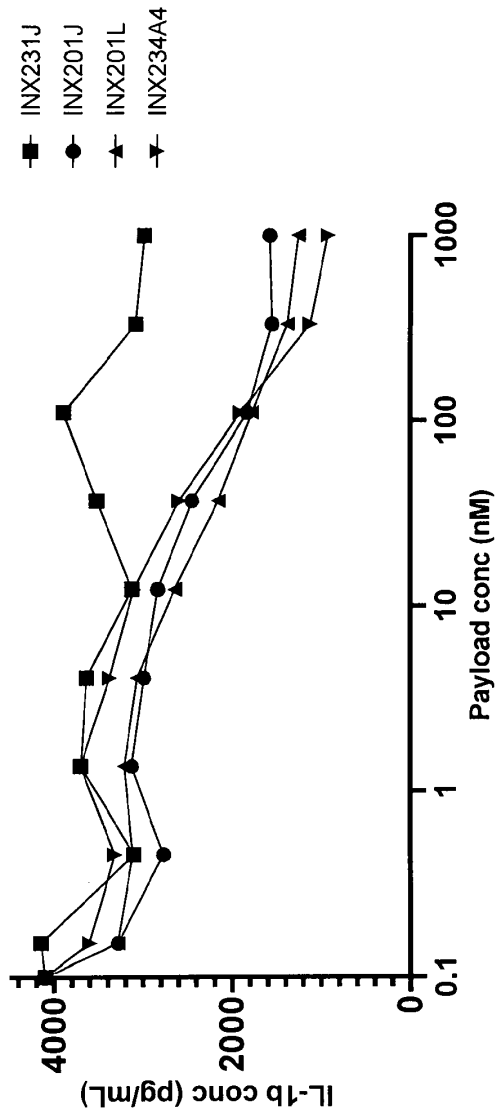


Figure 65: INX201 may lead to enhanced early potency of conjugates vs INX231. Average cytokine levels for IL-1 β measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.16nM) of conjugated steroid linker payloads, with the no treatment control plotted on the log-scale x-axis at <0.16nM; n=1, mean plotted of technical duplicates.

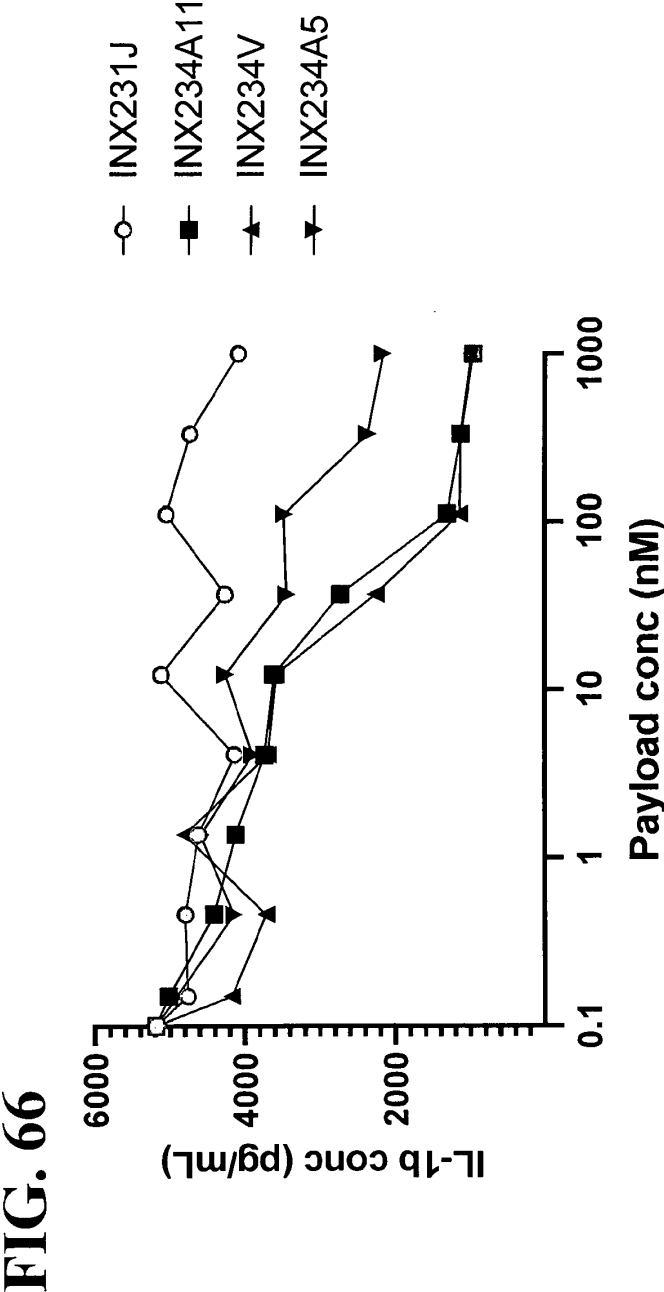


Figure 66: Analogs of INX V are potent relative to INX231J. Average cytokine levels for IL-1 β measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.16nM) of conjugated steroid linker payloads, with the no treatment control plotted on the log-scale x-axis at <0.16nM; n=1, mean plotted of technical duplicates.

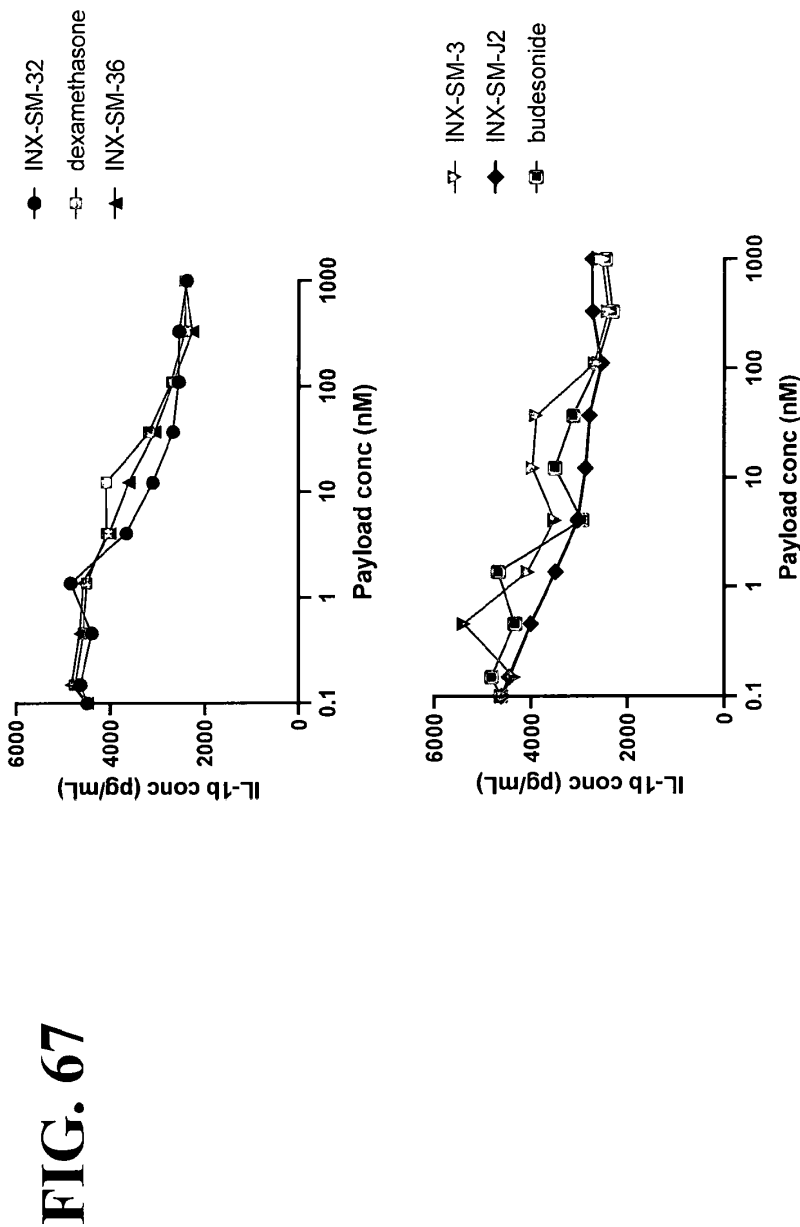


Figure 67: INX-SM-36, INX-SM-32 (top) and INX-SM-3, INX-SM-J2 (bottom) inhibit IL-1 β . INX-SM-32 and INX-SM-36 inhibit IL-1 β with similar potency to dexamethasone. INX-SM-3 and INX-SM-J2 have similar potency to budesonide. Cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.5nM) of steroid payloads, with the no treatment control plotted on the log-scale x-axis at <0.5nM; n=1 donor, mean of technical duplicates plotted.

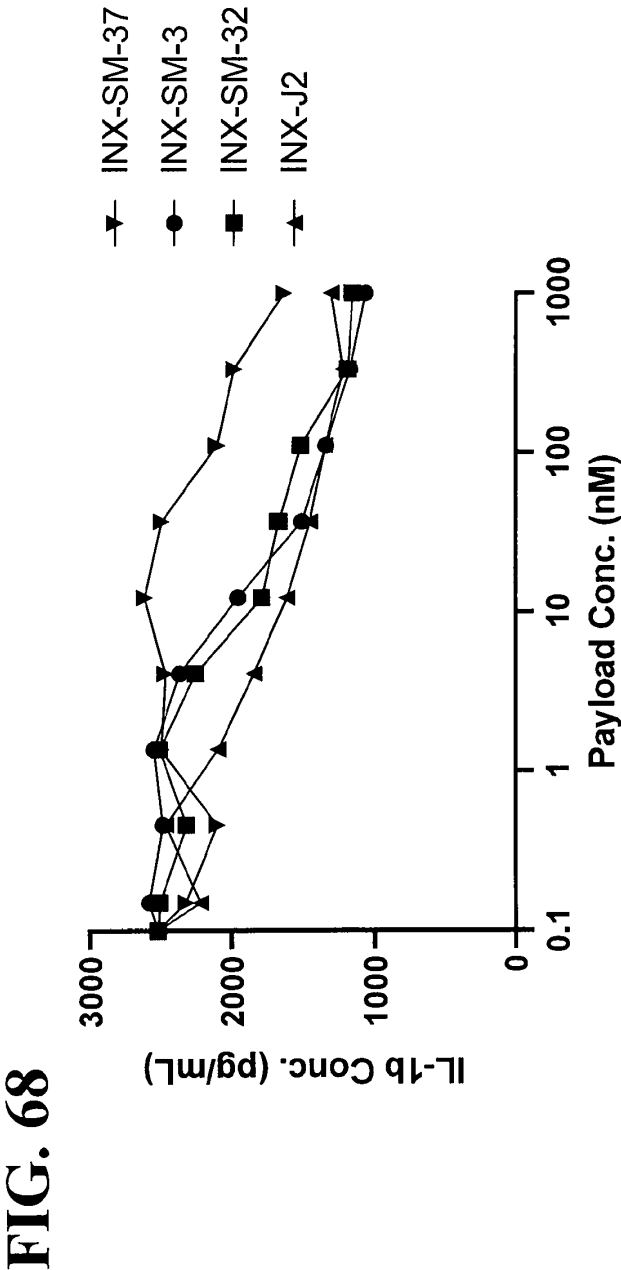


Figure 68: INX-SM-32, INX-J2, and INX-SM-3 have similar inhibition of IL-1 β . INX-SM-37 weakly inhibits IL-1 β . INX-SM-32, INX-J2 and INX-SM-3 inhibit IL-1 β with similar potency. Cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.15nM) of steroid payloads, with the no treatment control plotted on the log-scale x-axis at <0.5nM; n=1 donor, mean of technical duplicates plotted.

FIG. 69

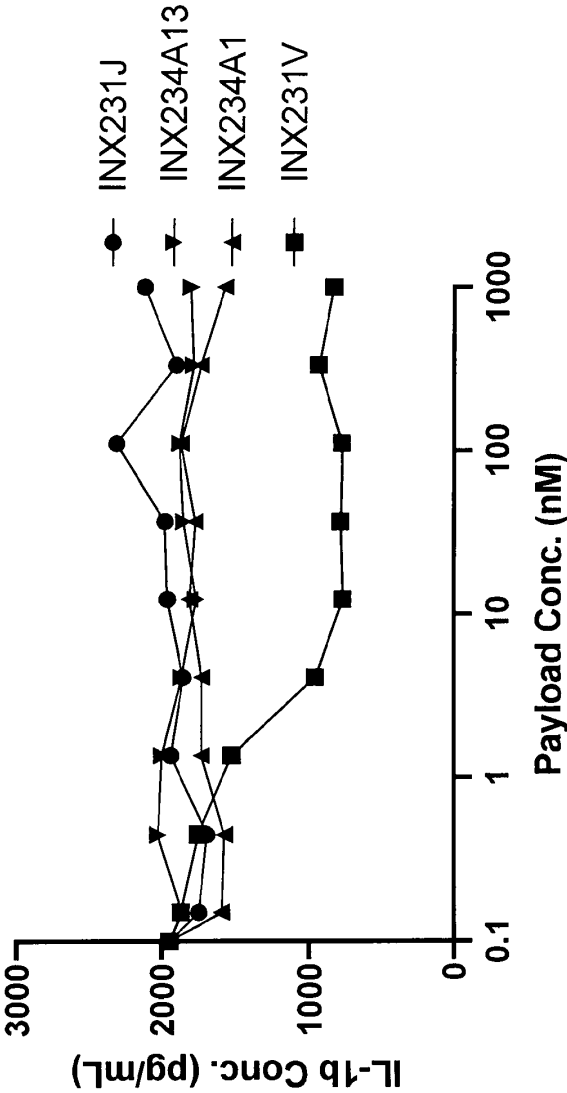


Figure 69: INX231V is substantially more potent than other INX231/INX234 conjugates. Average cytokine levels for IL-1 β measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.16nM) of conjugated steroid linker payloads, with the no treatment control plotted on the log-scale x-axis at <0.16nM; n=1, mean plotted of technical duplicates.

FIG. 70

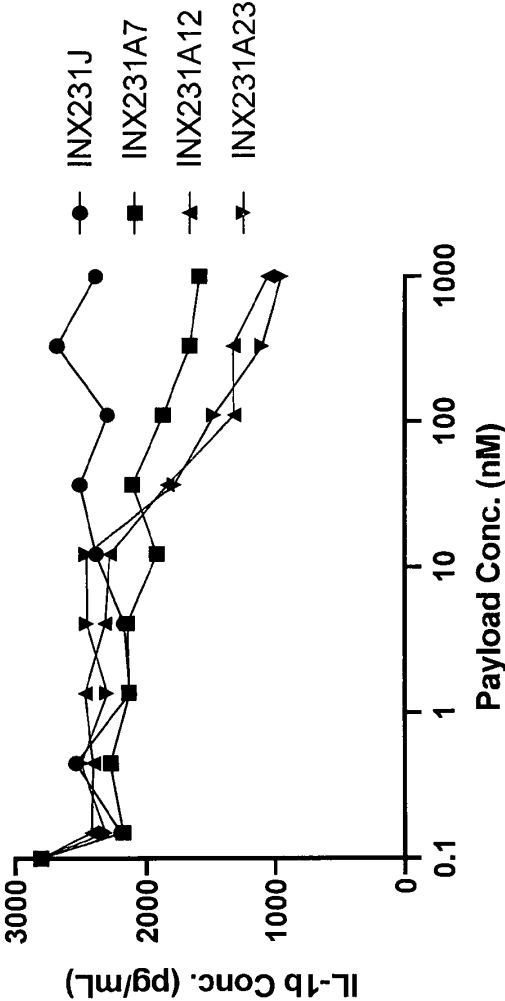


Figure 70: Phosphorylated and halogenated analogs of INX V are potent relative to INX J. Average cytokine levels for IL-1 β measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.16nM) of conjugated steroid linker payloads, with the no treatment control plotted on the log-scale x-axis at <0.16nM; n=1, mean plotted of technical duplicates.

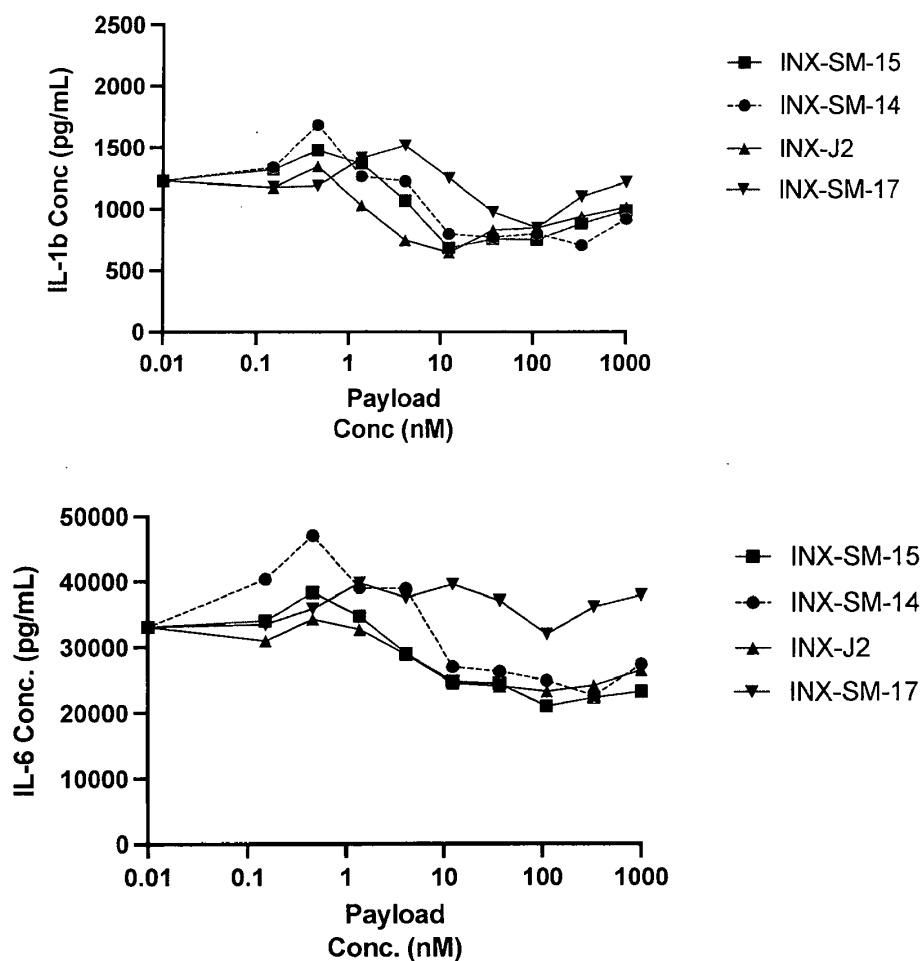
FIG. 71

Figure 71: INX-SM-14, INX-SM-15 and INX-J2 have similar inhibition of IL-1 β (top) and IL-6 (bottom). INX-SM-17 weakly inhibits IL-1 β but not IL-6. INX-SM-14, INX-SM-15 and INX-J2 inhibit IL-1 β and IL-6 with similar potency. Cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.15nM) of steroid payloads, with the no treatment control plotted on the log-scale x-axis at 0.01nM; n=1 donor, mean of technical duplicates plotted.

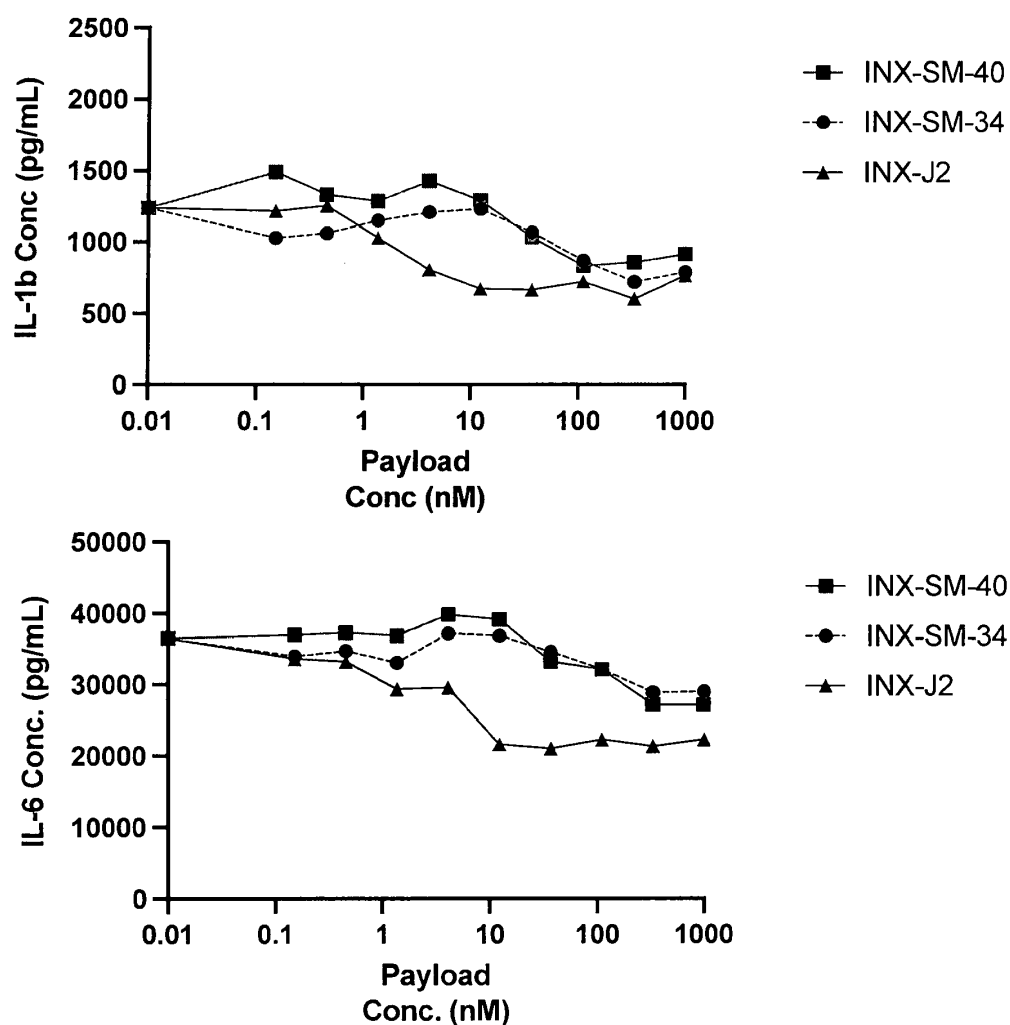
FIG. 72

Figure 72: INX-SM-40 and INX-SM-34 weakly inhibit IL-1 β (top) and IL-6 (bottom) relative to INX-J2. Cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.15nM) of steroid payloads, with the no treatment control plotted on the log-scale x-axis at 0.01nM; n=1 donor, mean of technical duplicates plotted.

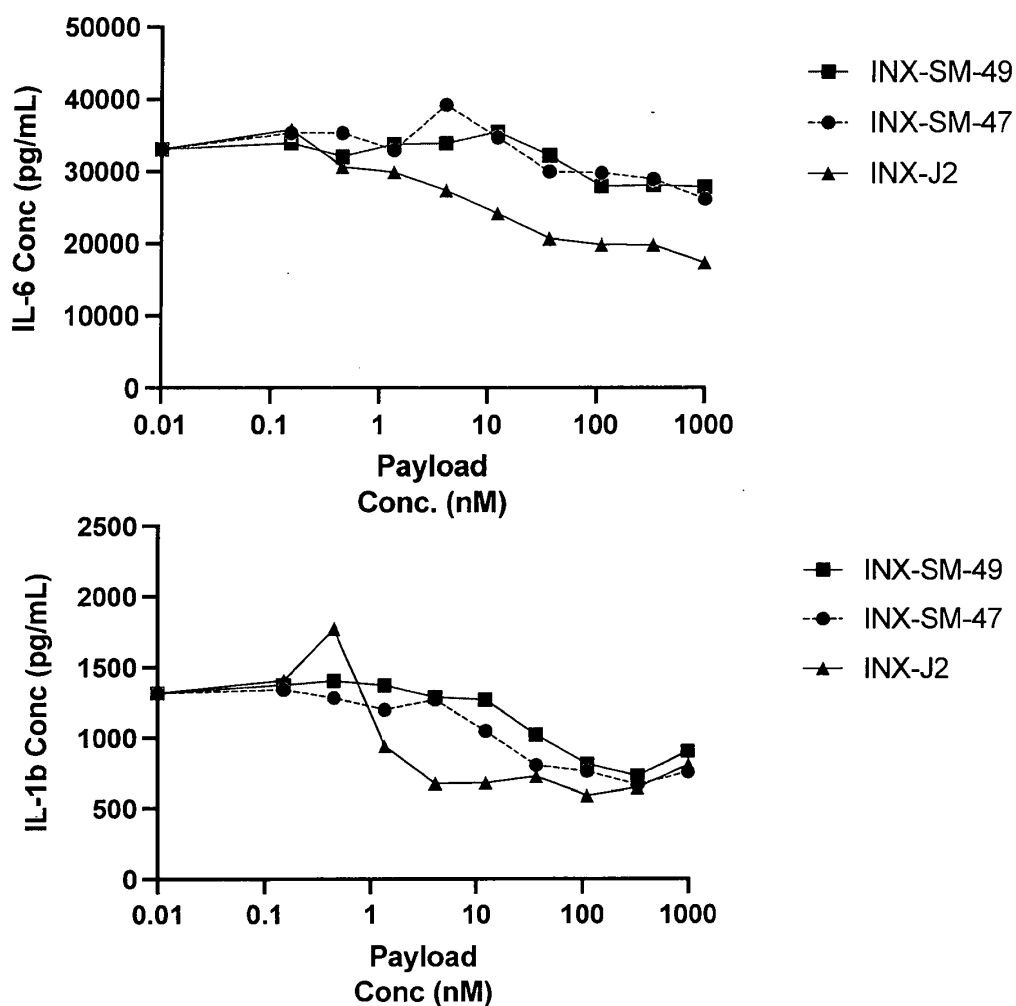
FIG. 73

Figure 73: INX-SM-49 and INX-SM-47 weakly inhibit IL-1 β (top) and IL-6 (bottom) relative to INX-J2. Cytokine levels (IL-1 β and IL-6) measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions (1000 – 0.15nM) of steroid payloads, with the no treatment control plotted on the log-scale x-axis at 0.01nM; n=1 donor, mean of technical duplicates plotted.

FIG. 74

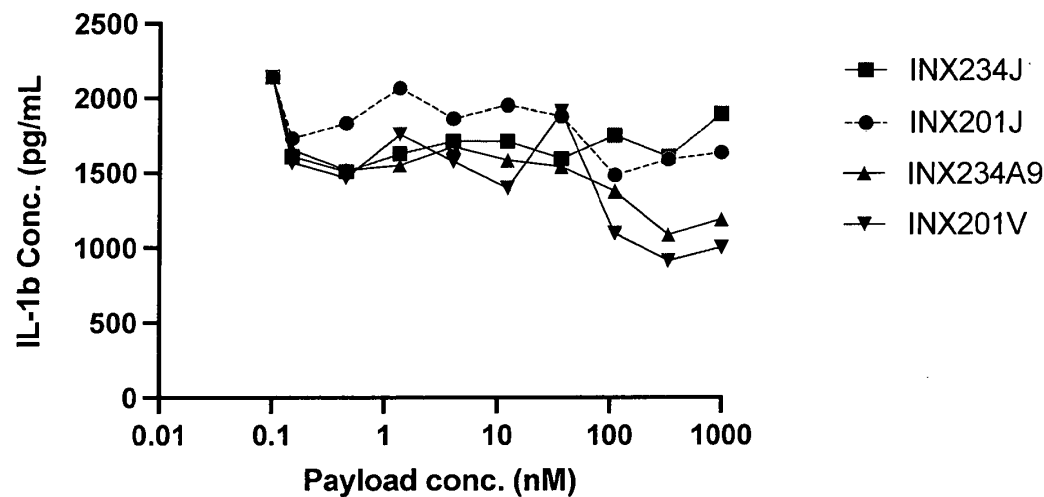


Figure 74: INX234A9 and INX201V show enhanced potency over INX234J and INX201J in reducing IL-1 β production. Cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions of anti-VISTA conjugates with respect to conjugated payload concentration (1000 – 0.15nM), with the no treatment control plotted on the log-scale x-axis at 0.1nM; n=1 donor, mean of technical duplicates plotted.

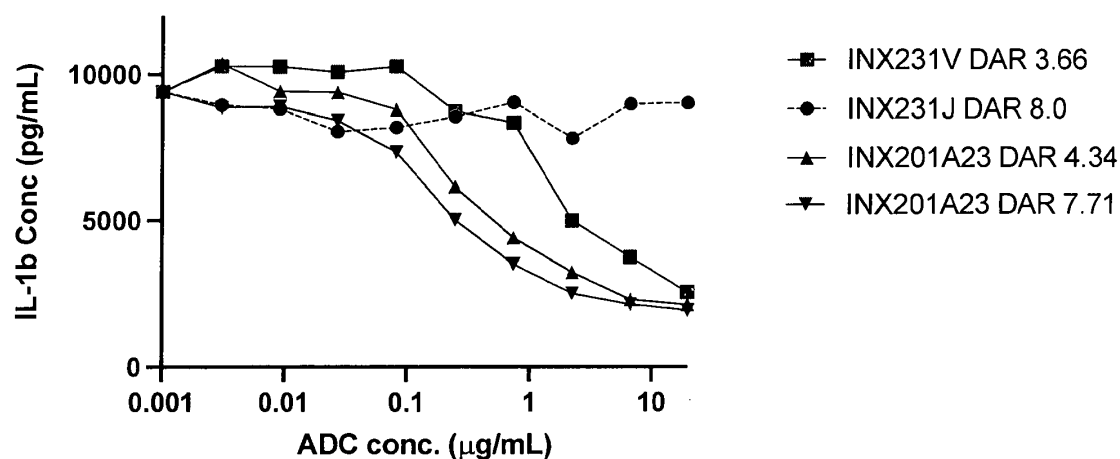
FIG. 75

Figure 75: INX V and INX A23 at equivalent or reduced DAR show enhanced potency over INX J in reducing IL-1 β production. Cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions of anti-VISTA conjugates with respect to total ADC concentration (20 – 0.003 μ g/mL), with the no treatment control plotted on the log-scale x-axis at 0.001 μ g/mL; n=1 donor, mean of technical duplicates plotted.

FIG. 76

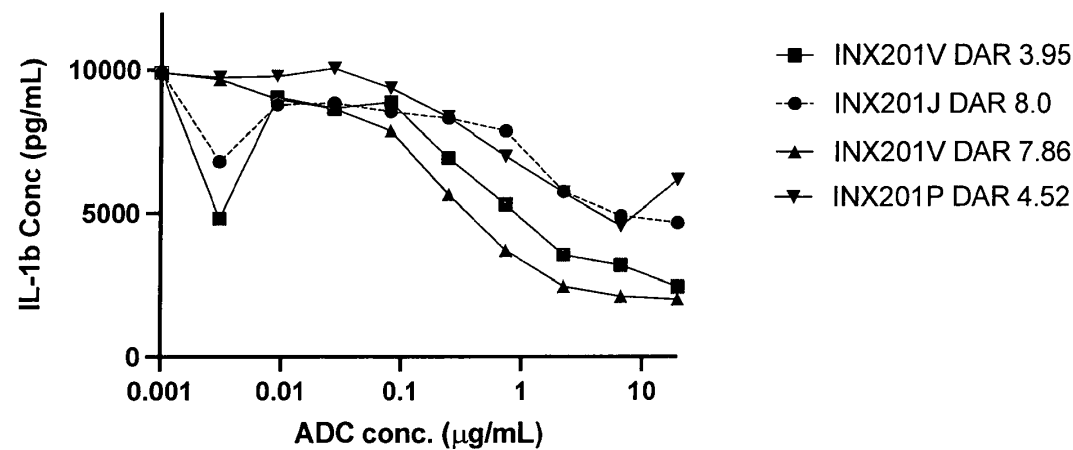


Figure 76: INX V conjugates have enhanced potency over INX J conjugate in IL-1 β impact even with reduced DAR. Cytokine levels measured at 24hr for human PBMC incubated with 1ng/mL LPS and serial dilutions of anti-VISTA conjugates with respect to total ADC concentration (20 – 0.003 μ g/mL), with the no treatment control plotted on the log-scale x-axis at 0.001 μ g/mL; n=1 donor, mean of technical duplicates plotted.

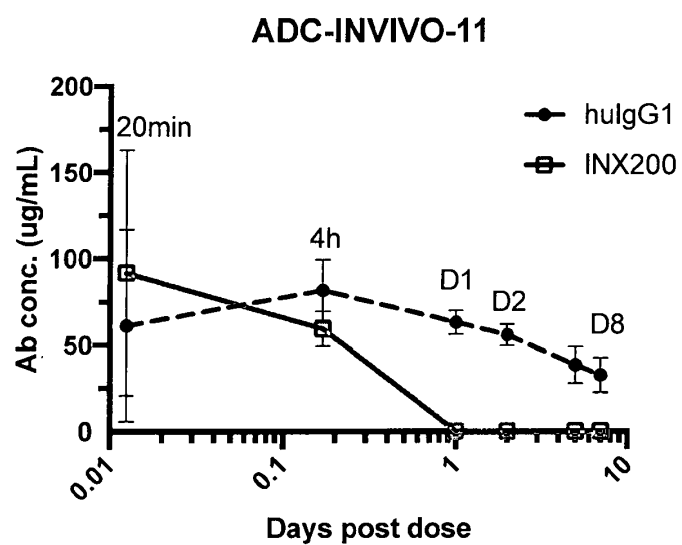
FIG. 77

Figure 77: PK for INX200 vs. human IgG1. Plasma concentrations of antibodies at annotated time points in hVISTA KI mice (SD; n=5/group).

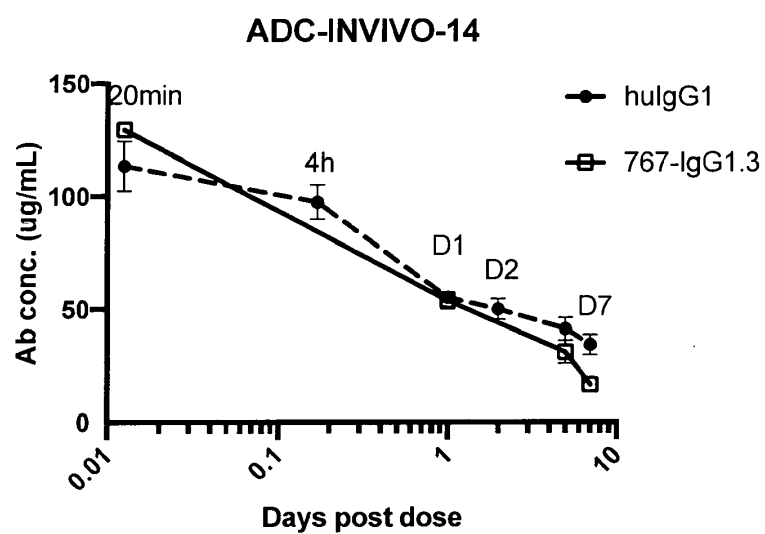
FIG. 78

Figure 78: PK for 767-IgG1.3 vs. human IgG1. Plasma concentrations of antibodies at annotated time points in hVISTA KI mice (SD; n=5/group).

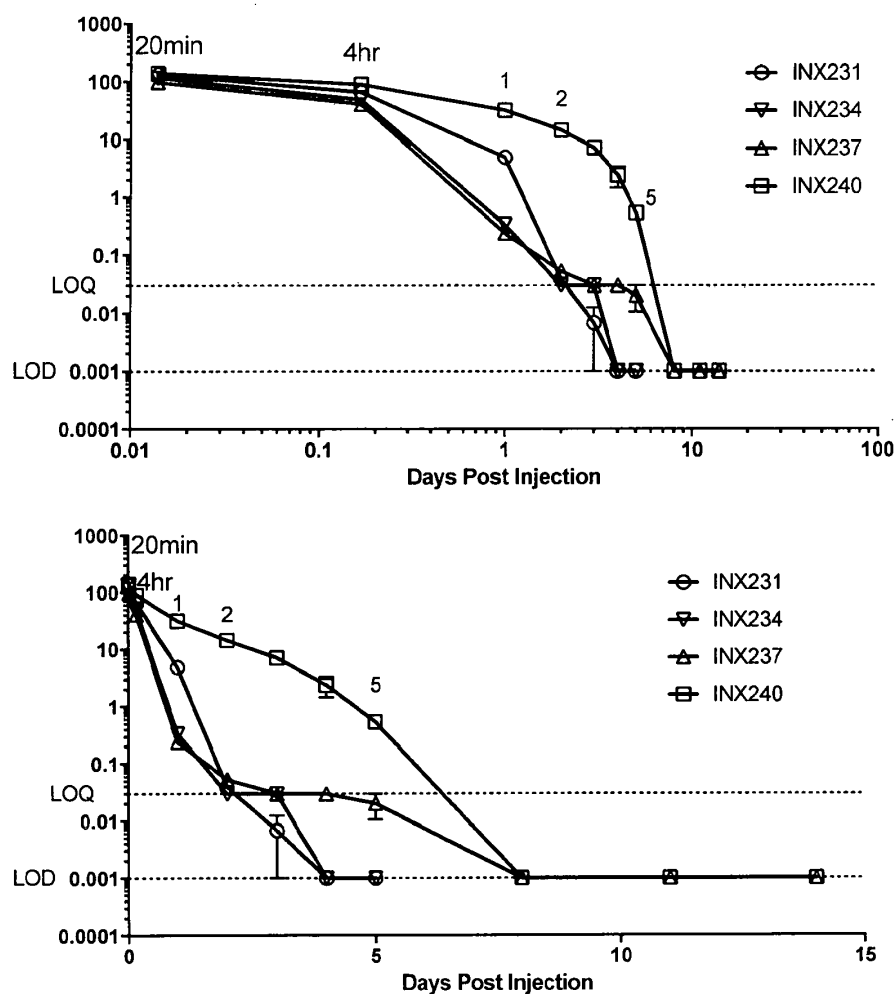
FIG. 79

Figure 79: PK for INX231, INX234, INX237 and INX240. Plasma concentrations of antibodies at annotated time points in hVISTA KI mice (SD; n=5/group). Left graph shows y and x axes in Log10, while for right graph, only the y axis is in Log10

FIG. 80

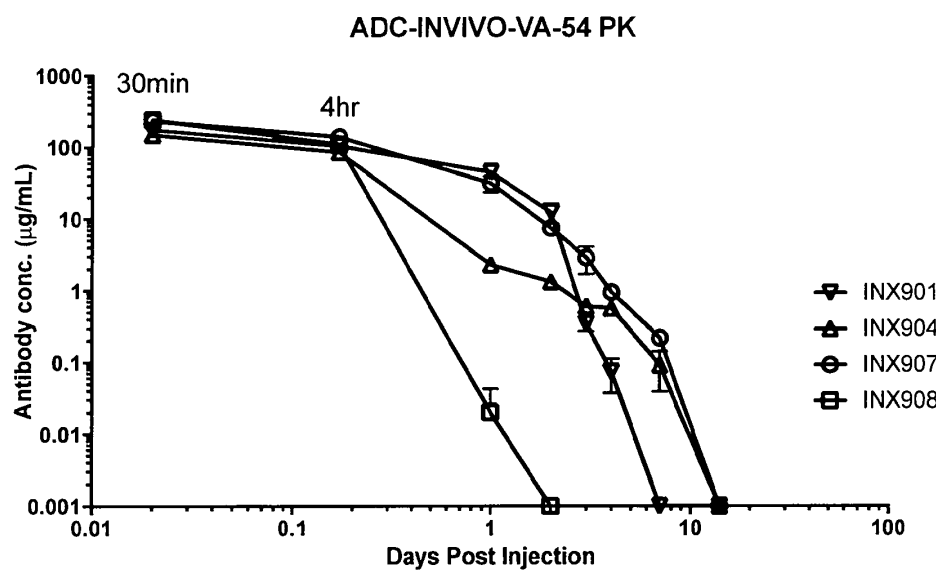


Figure 80: PK for INX901, INX904, INX907 and INX908. Plasma concentrations of antibodies at annotated time points in hVISTA KI mice (SD; n=5/group).

FIG. 81

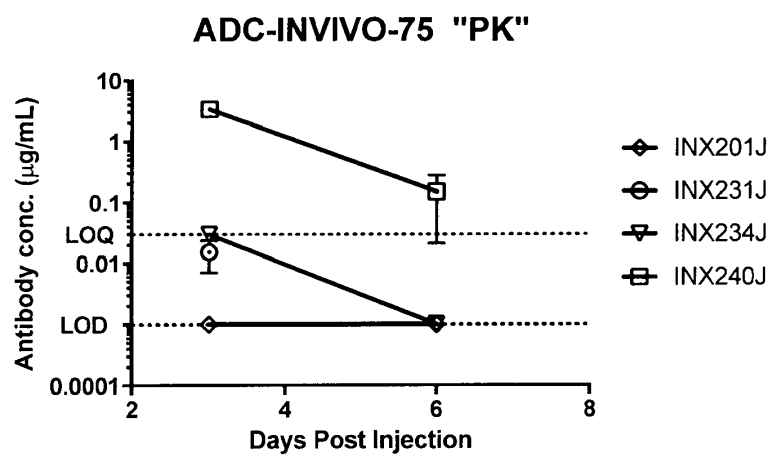


Figure 81: PK for INX201J, INX231J, INX234J and INX240J. Plasma concentrations of antibodies at annotated time points in hVISTA KI mice (SD; n=4/group).

FIG. 82

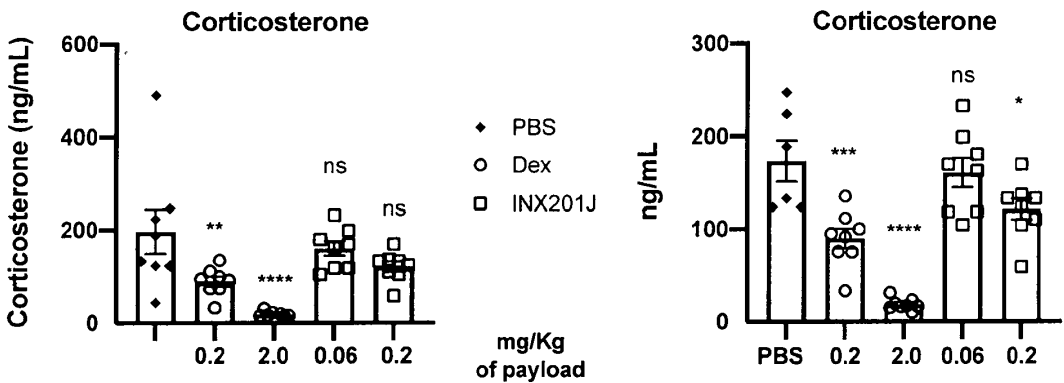


Figure 82: Changes in plasma corticosterone levels. (SEM, one-way ANOVA, n=8 except for PBS control group in right graph with n=6).

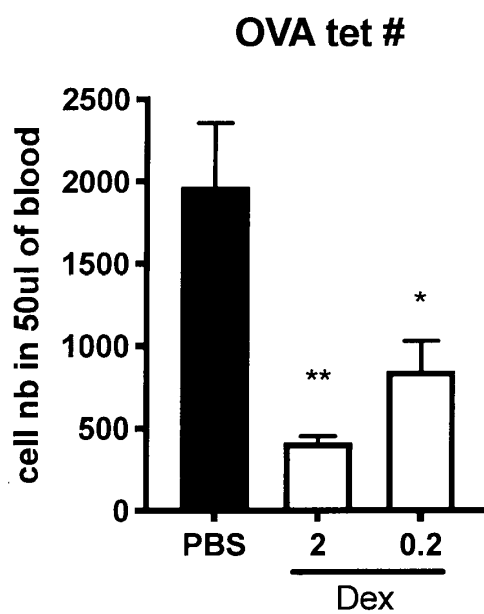
FIG. 83

Figure 83: Ag-specific CD8 T cell numbers from peripheral blood on day 6 post immunization. (SEM, one-way ANOVA, n=5).

FIG. 84

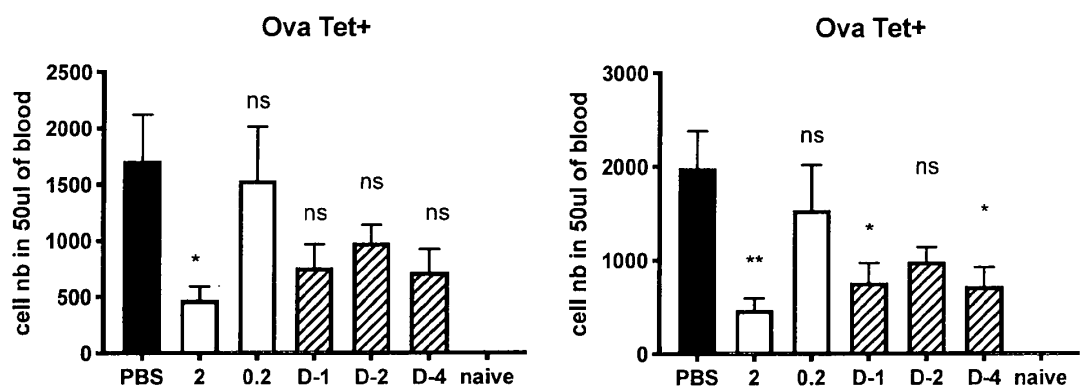


Figure 84: Ag-specific CD8 T cell numbers from peripheral blood on day 6 post immunization. The graph on the left shows the control group with all samples included, the one on the right shows the control group with one outlier removed (SEM, one-way ANOVA, n=5 except for naïve; one sample was excluded in the group with Dex at 0.2 mg/Kg as a failed immunization).

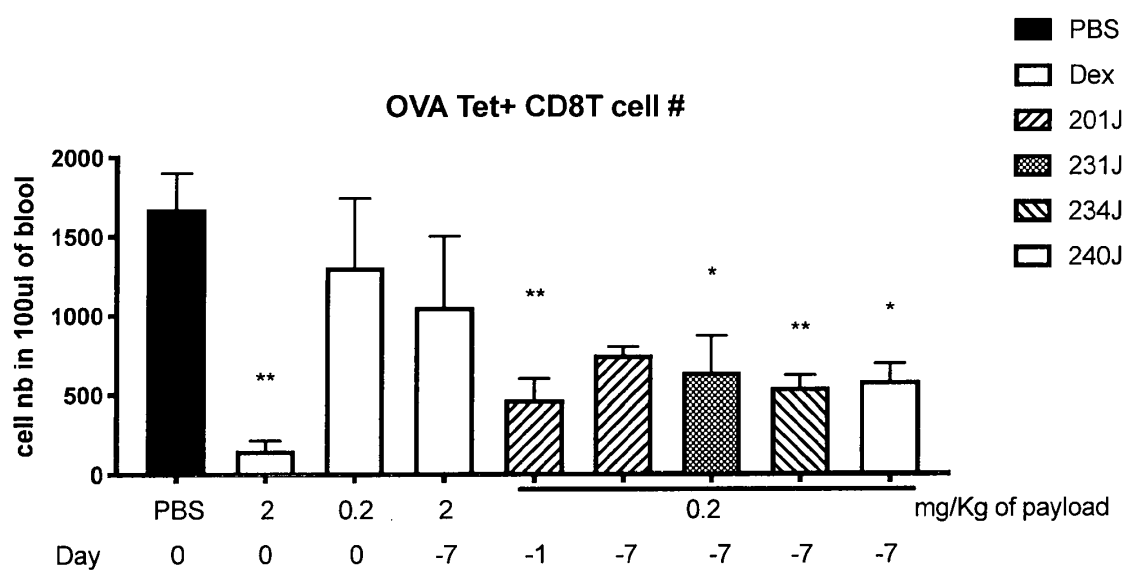
FIG. 85

Figure 85: Ag-specific CD8 T cell numbers from peripheral blood on day 6 post immunization. In this experiment, multiple samples had to be excluded due to a technical problem during processing: PBS group n=3, Dex at 2 mg/Kg n=2, Dex at 0.2 mg/Kg n=3, INX201J D-1 n=5, INX201J D-7 n=2, INX231J D-7 n=3, INX234J D-7 n=5, INX240J D-7 n=4 (SEM, one-way ANOVA, D=day).

FIG. 86

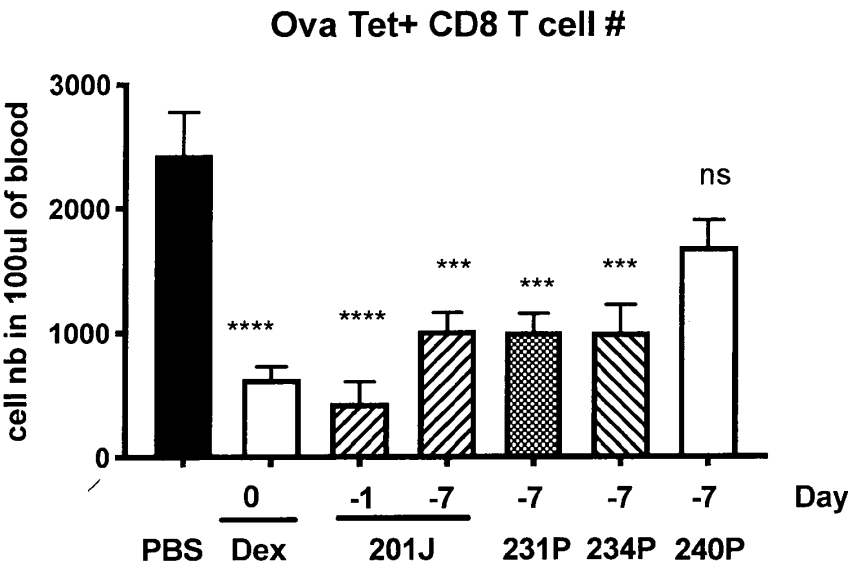


Figure 86: Ag-specific CD8 T cell numbers from peripheral blood on day 6 post immunization. For technical reason, we excluded 2 samples in the PBS, INX231P and INX234P groups; for all the other groups n=5 (SEM, one-way ANOVA).

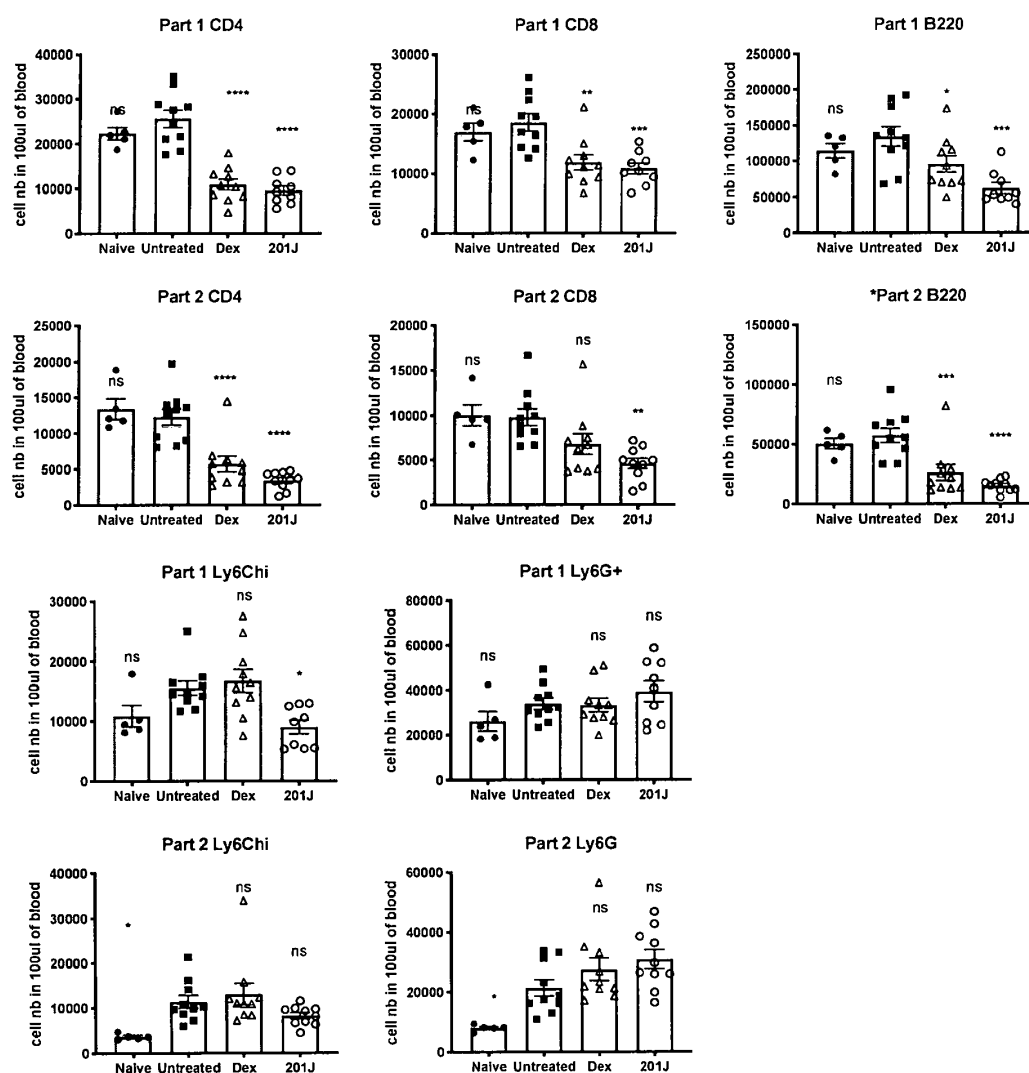
FIG. 87

Figure 87: Changes in absolute cell numbers in peripheral blood in the 2 experiment schedules. OVA challenge on days 14 to 18 (Part 1) and on days 21 to 25 (Part 2) (SEM, one-way ANOVA, n=10 except for naïve group with n=5).

FIG. 88

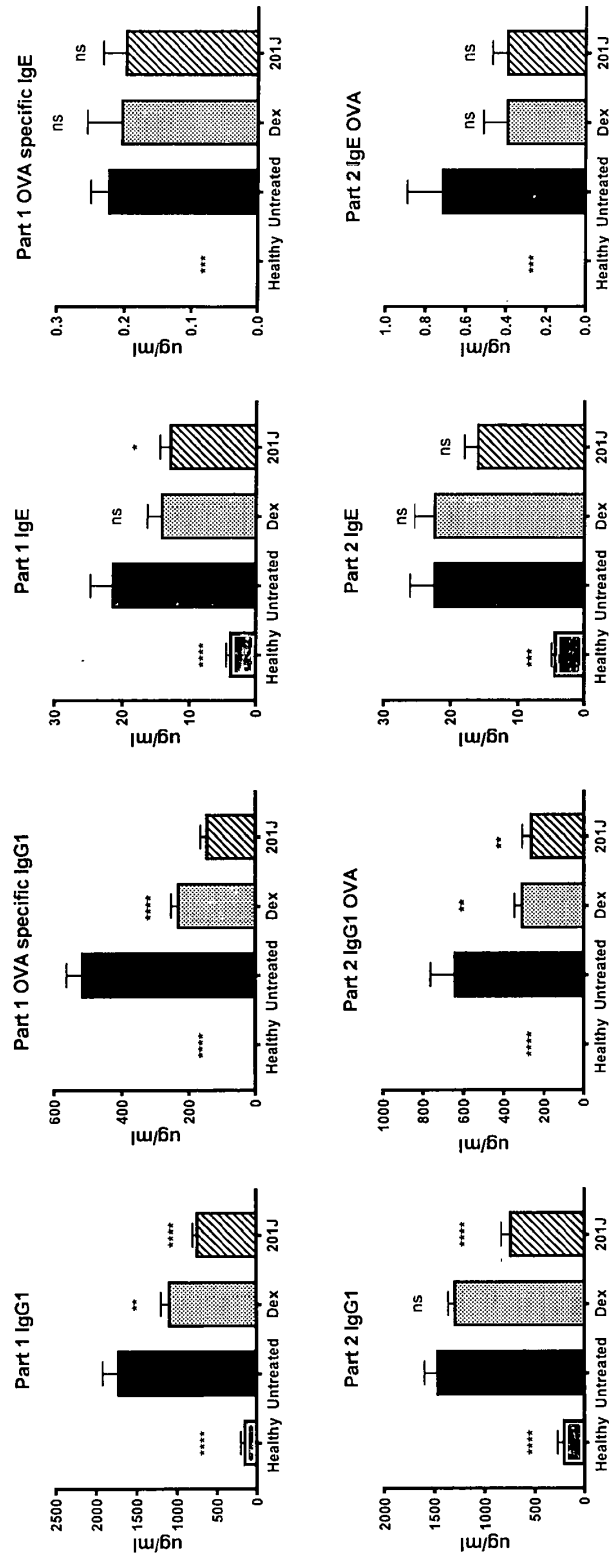


Figure 88: Changes in immunoglobulin productions in peripheral blood in the 2 experiment schedules. OVA challenge on days 14 to 18 (Part 1) and on days 21 to 25 (Part 2) (SEM, one-way ANOVA, n=10 except for naïve group with n=5).

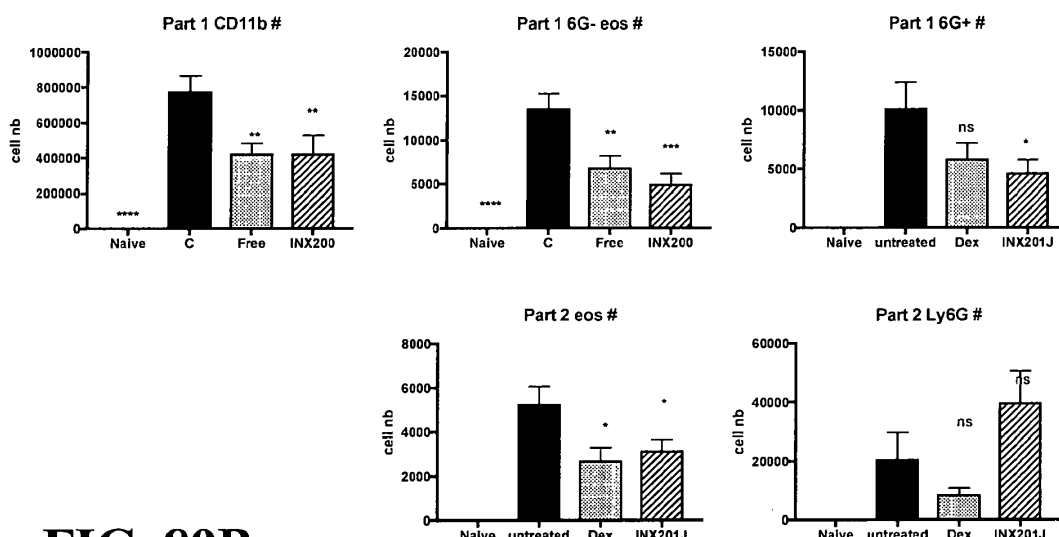
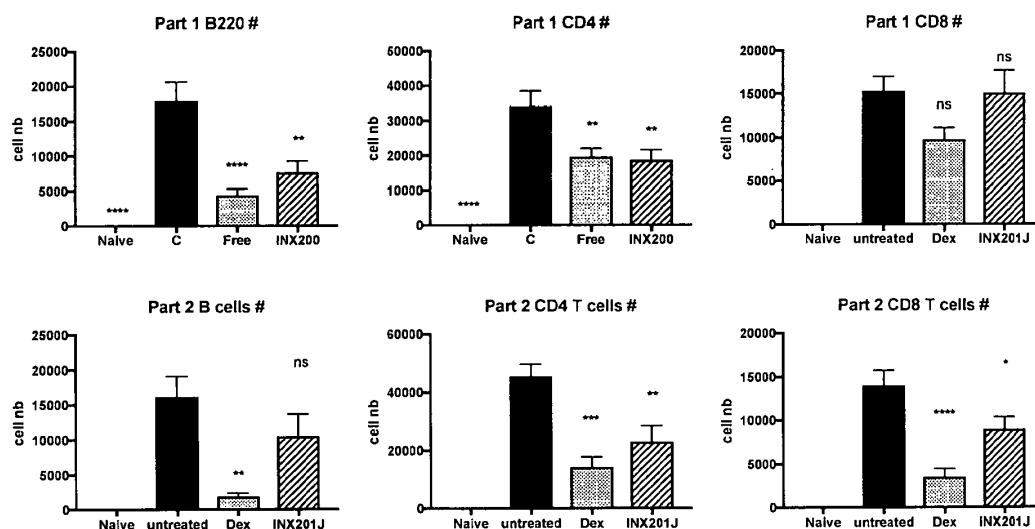
FIG. 89A**FIG. 89B**

Figure 89: A-B: Changes in immune infiltrate in BAL in the 2 experiment schedules. OVA challenge on days 14 to 18 (Part 1) and on days 21 to 25 (Part 2); A) Changes in myeloid infiltrate; B) in lymphocytic infiltrate (SEM, one-way ANOVA, n=10 with 2 samples censored in control group, 3 in both Dex group and INX201J group; for naïve group n=5).

FIG. 90

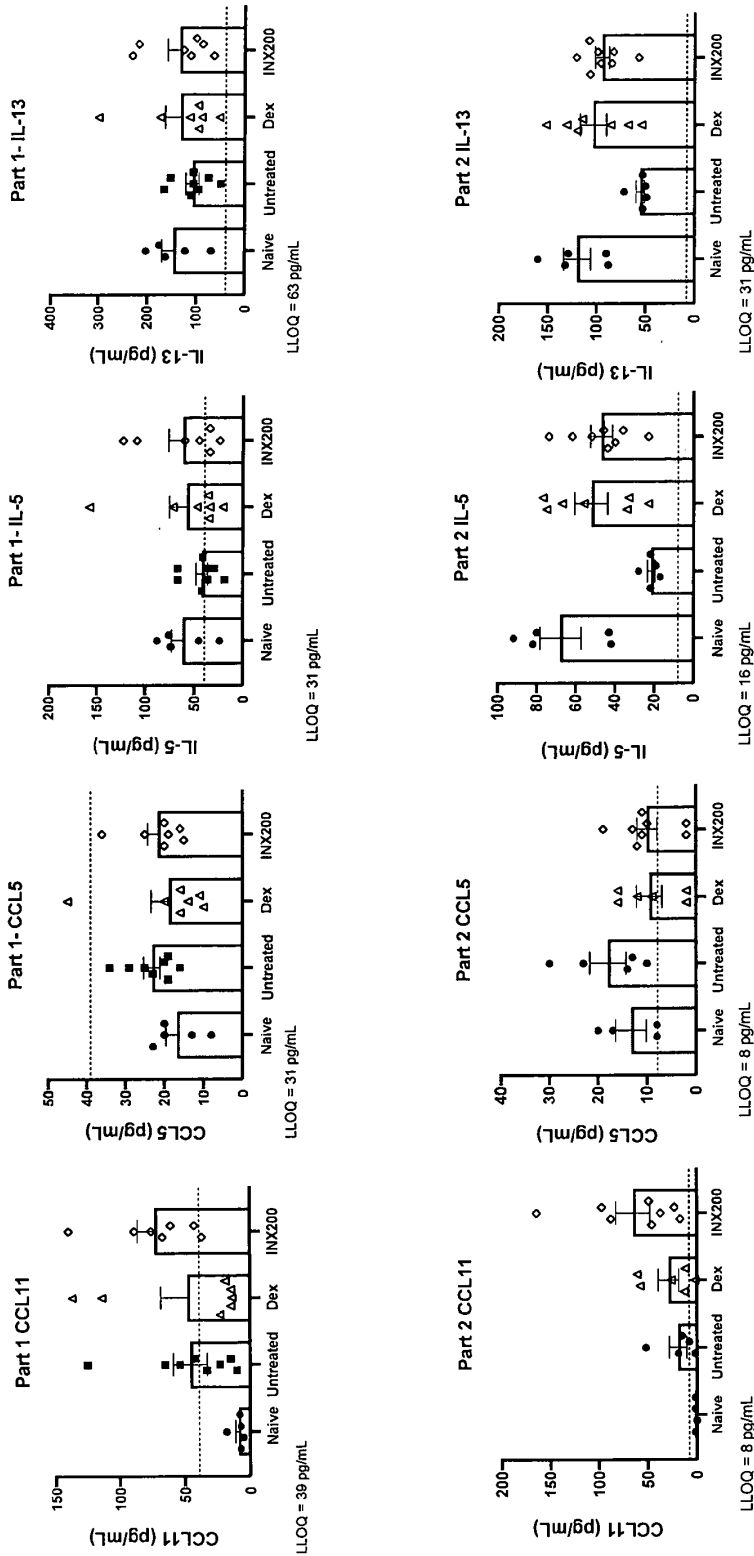


Figure 90: Changes in cytokine levels in BAL in the 2 experiment schedules. OVA challenge on days 14 to 18 (Part 1) and on days 21 to 25 (Part 2) (SEM, on-way ANOVA, n=10 with 2 samples censored in control group, 3 in both Dex group and INX201J group; for naive group n=5).

FIG. 91

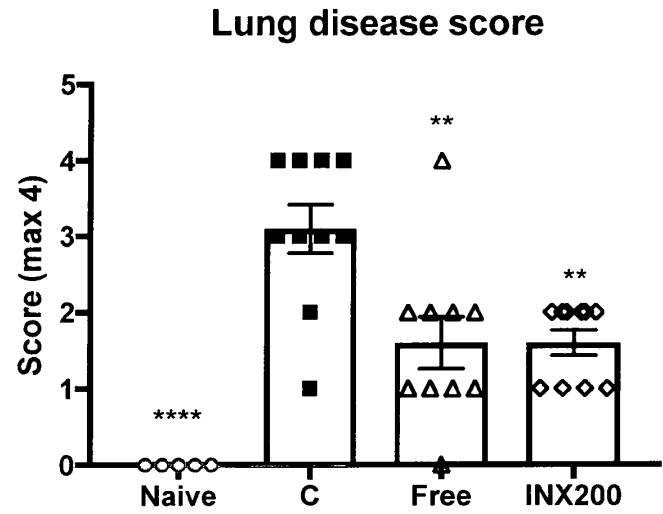


Figure 91: Lung disease scoring for Part 1 of the study. (SEM, one-way ANOVA, n=10 except for naïve group n=5).

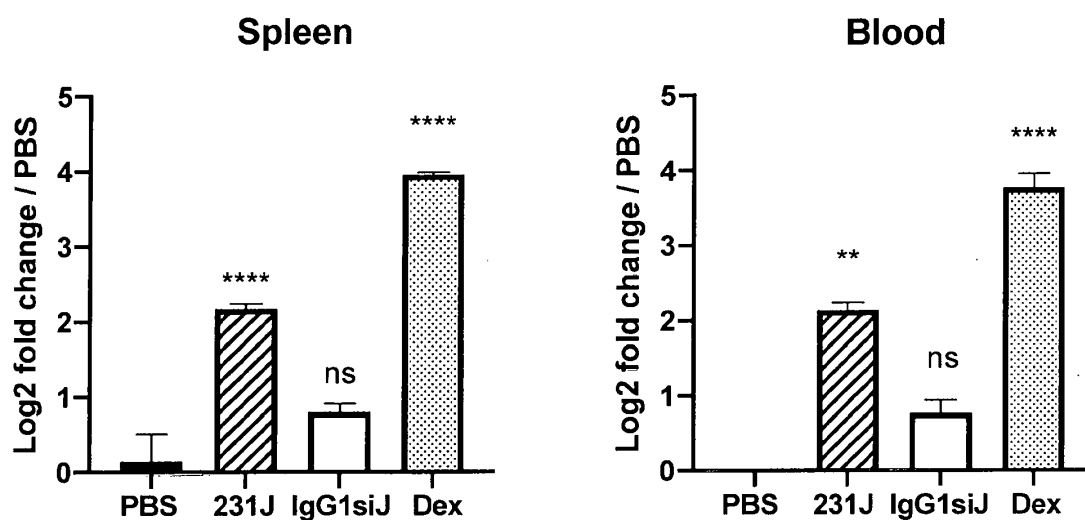
FIG. 92

Figure 92: FKBP5 transcriptional activation following INX231J injection in spleen (left) and blood (right) cells. INX231J effects (red) and hlgG1siJ (grey) were measured at 20h post 1 single i.v. injection at 5 mg/Kg (delivering 0.1 mg/Kg of payload). Dex effects (blue) were measured 2h post a single i.p. injection at 2 mg/Kg. FKBP5 transcription levels were measured by real time PCR and presented as Log2 fold change vs. the mean of the PBS control group. (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group).

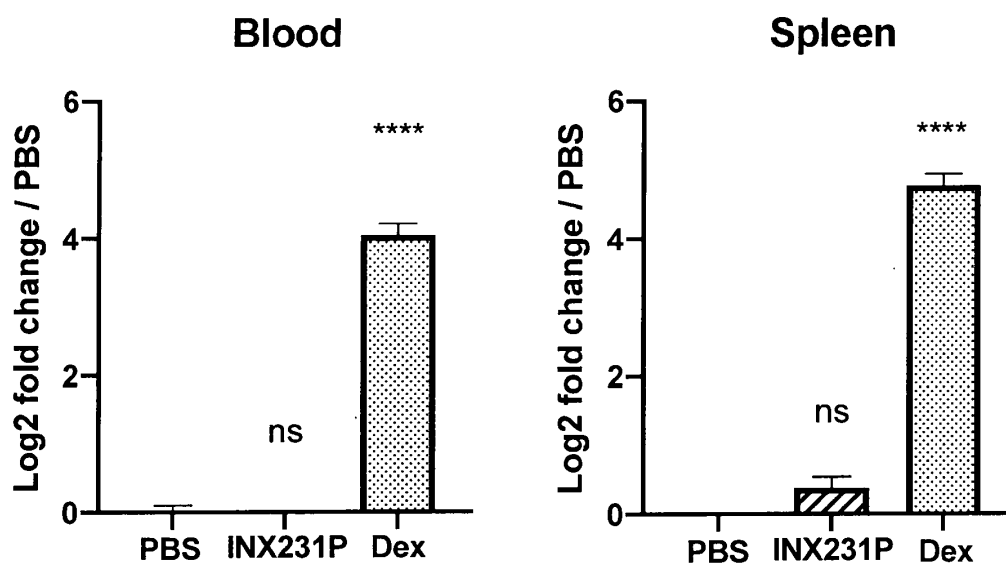
FIG. 93

Figure 93: FKBP5 transcriptional activation following INX231P injection in C57Bl/6 mice. INX231P effects (red) were measured at 20h post 1 single i.v. injection at 10 mg/Kg (delivering 0.2 mg/Kg of payload). Dex effects (blue) were measured 2h post a single i.p. injection at 2 mg/Kg. FKBP5 transcription levels were measured by real time PCR and presented as Log2 fold change vs. the mean of the PBS control group. (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group).

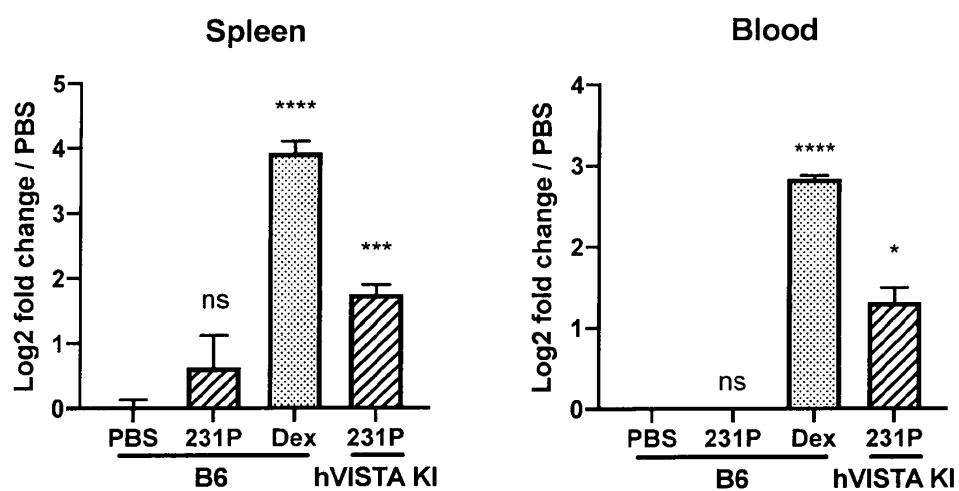
FIG. 94

Figure 94: FKBP5 transcriptional activation following INX231P injection in C57Bl/6 or hVISTA KI mice. INX231P effects (red) were measured at 20h post 1 single i.v. injection at 10 mg/Kg (delivering 0.2 mg/Kg of payload). Dex effects (blue) were measured 2h post a single i.p. injection at 2 mg/Kg. FKBP5 transcription levels were measured by real time PCR and presented as Log2 fold change vs. the mean of the PBS control group. (n=4 mice/group; ordinary one-way ANOVA as compared to PBS-only group).

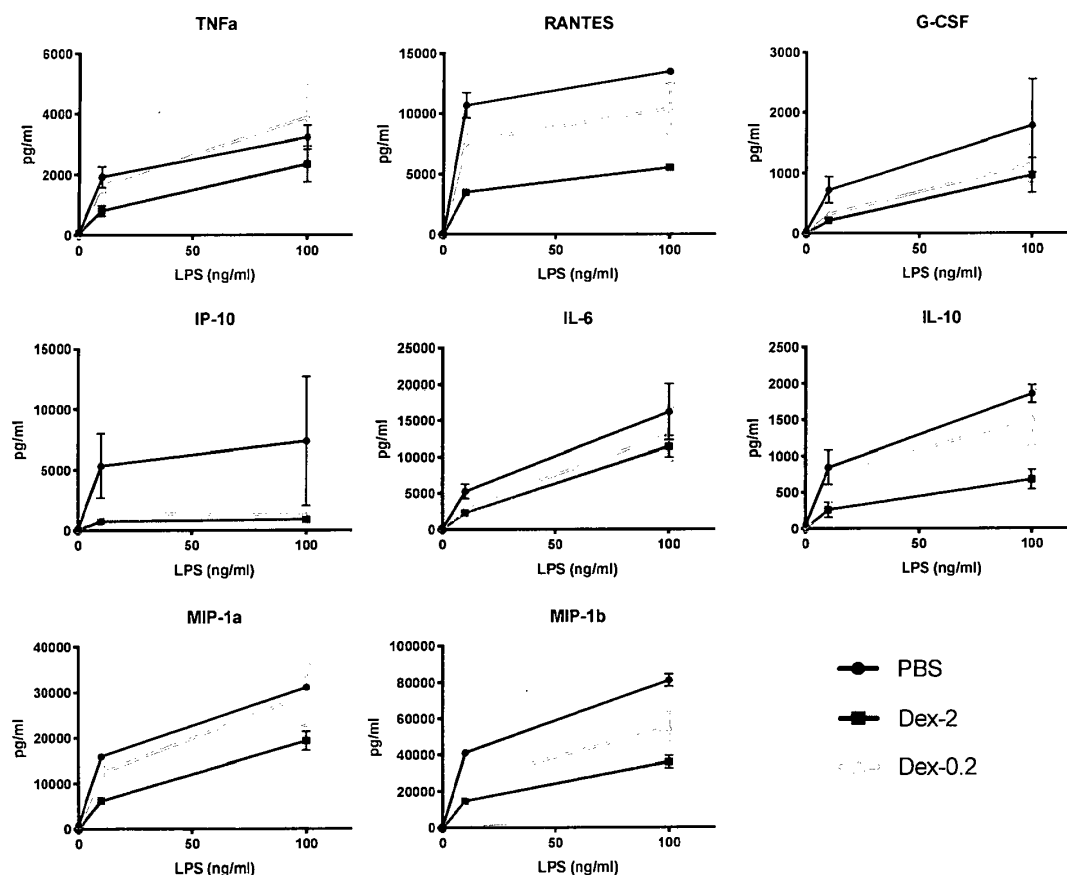
FIG. 95

Figure 95: In vivo Dex treatment causes decrease in ex vivo monocyte inflammatory response to LPS. Mice were injected i.p. with PBS or Dex at 2 mg/Kg or 0.2 mg/Kg. After 2h, spleen monocytes were isolated, put in culture and subjected to LPS stimulation at 0, 10 and 100 ng/ml. 24h supernatants were analyzed on Luminex 32-plex (n=5 mice/group but samples 1,2,3 and 4,5 were pooled into 2 samples).

FIG. 96

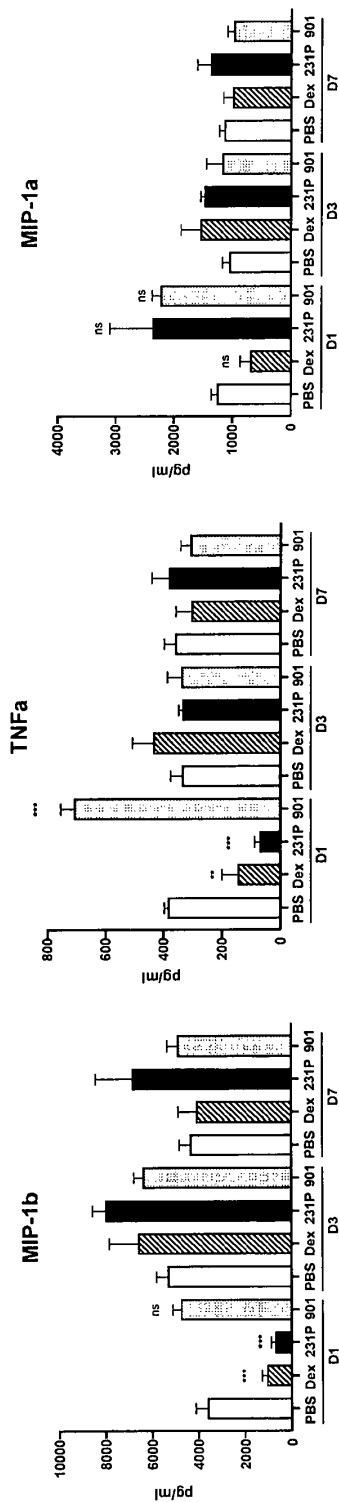


Figure 96: In vivo treatment with INX231P impact on ex vivo monocyte inflammatory response to LPS. Mice were injected i.p. with PBS or Dex at 2 mg/Kg 2h, 2 or 6 days before cell isolation; injected i.v. with INX231P and INX901 at 10 mg/Kg 1, 3 and 7 days before cell isolation. After isolation, spleen monocytes were put in culture and subjected to LPS stimulation at 0 or 10 ng/ml (only 10 ng/ml is shown). 24h supernatants were analyzed by ELISA (n=4 mice/group; one-way ANOVA comparing to PBS treated group was done only for the day 1 (D1) samples).

FIG. 97

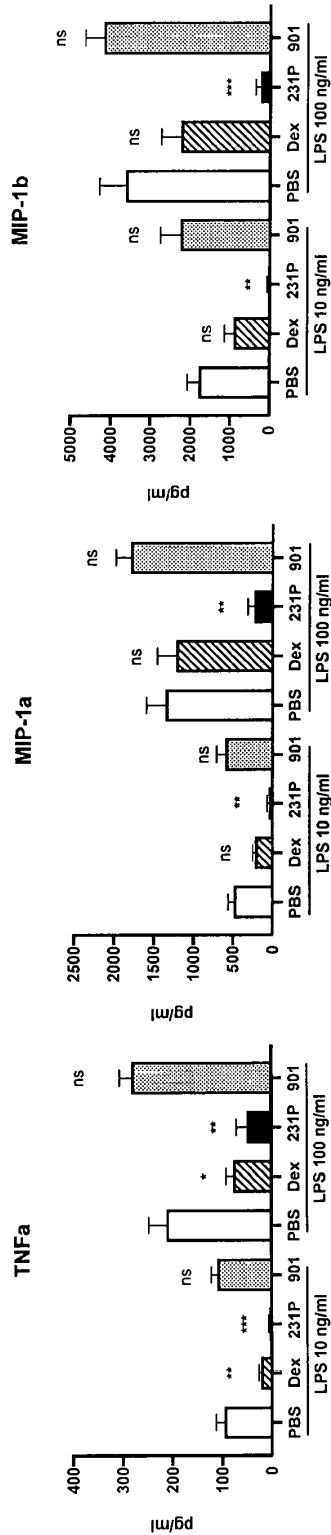


Figure 97: In vivo treatment with INX231P impact on ex vivo monocyte inflammatory response to LPS. Mice were injected i.p. with PBS or Dex at 2 mg/kg 2h before cell isolation; injected i.v. with INX231P and INX901 at 10 mg/kg 24h before cell isolation. Spleen monocytes were put in culture and subjected to LPS stimulation at 10 and 100 ng/ml. 24h supernatants were analyzed by ELISA (n=4 mice/group; separate ordinary one-way ANOVA as compared to PBS treated group for each LPS dose).

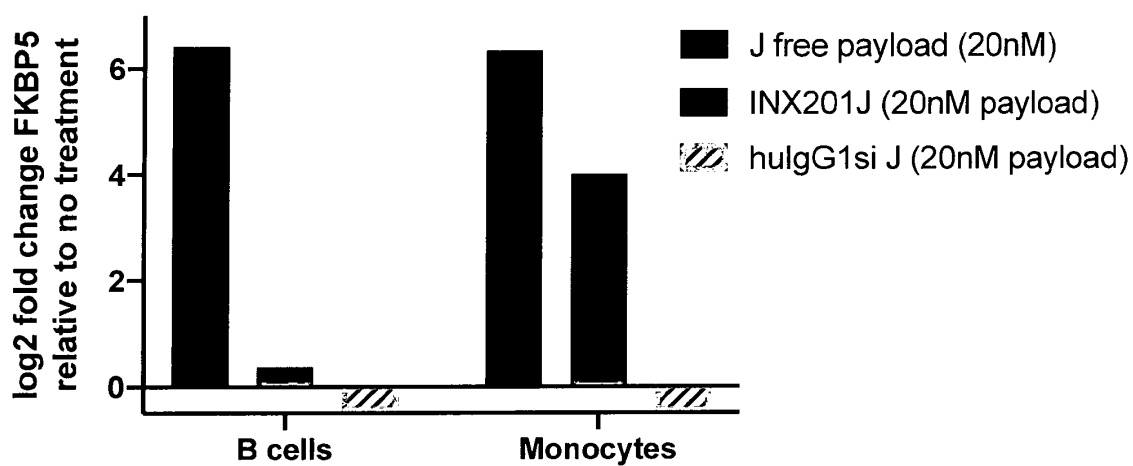
FIG. 98

Figure 98: FKBP5 transcriptional activation in B cells or monocytes. Cells were treated with 20 nM of free J payload, or equimolar amounts of payload conjugated to INX201 (INX201J) or isotype control (hulG1siJ). Transcript levels were analyzed as technical duplicates.

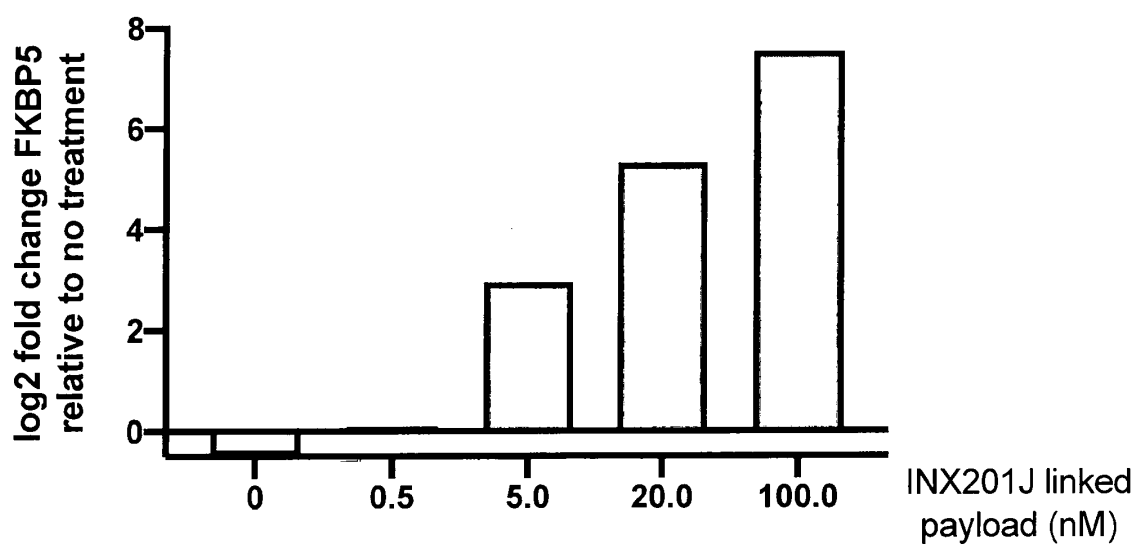
FIG. 99

Figure 99: FKBP5 transcriptional activation in monocytes. Cells were treated with increasing amount of INX201J [0-100nM payload]). The 0 payload represents treatment with unconjugated INX201 antibody alone at the same amount of antibody as in the 100nM payload INX201J dose. Transcript levels were analyzed as technical duplicates

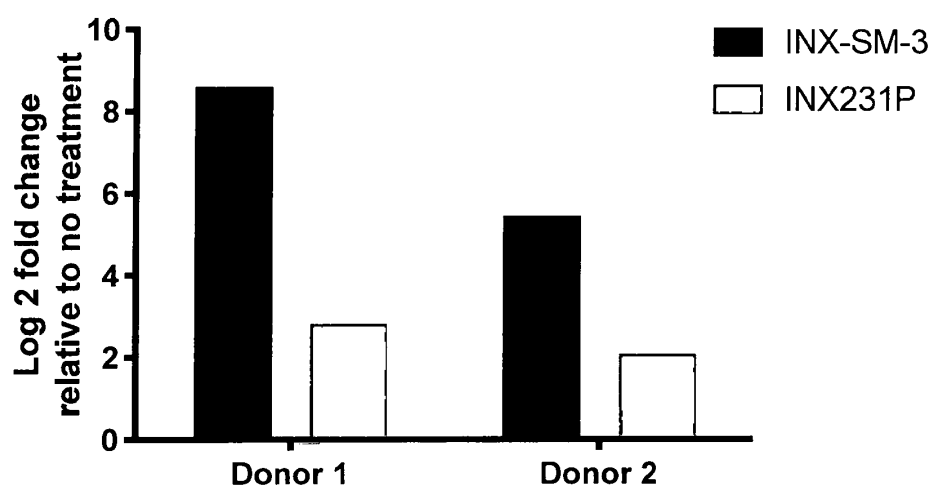
FIG. 100

Figure 100: FKBP5 induction in T regs from 2 donors treated with 20nM INX-SM-3 (free payload) or the molar payload equivalent of INX231P (conjugated payload). Samples were generated and analyzed as singlicates. Isolated Treg purity was $\geq 75\%$ as assessed by flow cytometry.

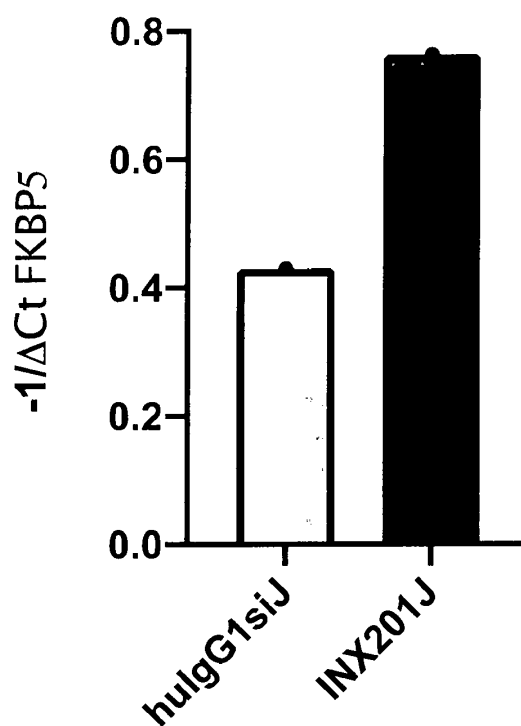
FIG. 101

Figure 101: FKBP5 induction in T regs from 1 donor treated with 20nM payload equivalent of INX201J relative to 20nM payload equivalent hulG1siJ. Samples were analyzed as technical duplicates. Isolated Treg purity was $\geq 75\%$ as assessed by flow cytometry.

FIG. 102

Summary of RNAseq datasets

Light grey: Present
Dark grey: Not present

Characteristic	VISTA	TNF	CD163	CD74	PRLR	CD40
Immune restricted						
T cell expr	+	+	◻	++	◻	◻
Activation not required						
B cell expr	◻	◻	◻	++	◻	++
Monocyte / Macrophage expr	++	+	+	++	+	+
Neutrophil expr	++	◻	◻	◻	◻	◻
Treg expr	+	◻	◻	+	◻	◻

Legend: Summary table made based on the human protein atlas version 20.1 (<https://www.proteinatlas.org>) – (see Berglund L et al., **A gene-centric Human Protein Atlas for expression profiles based on antibodies**. *Mol Cell Proteomics*. (2008))

Qualification of RNA Expression level is based on the Transcripts Per Million (TPM) reported. TPM<10 (minimal/no expression “-”); TPM 10-100 (low/intermediate expression “+”); TPM>100 (high expression “++”).

Note: TPM is a normalization method for RNA-seq and should be read as “for every 1,000,000 RNA molecules in the RNA-seq sample, x came from this gene/transcript”

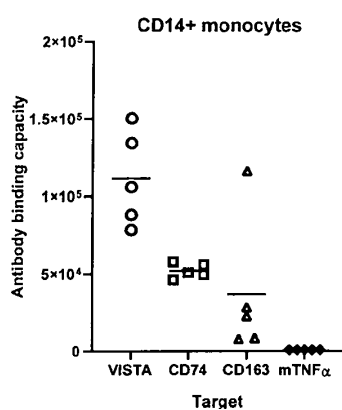
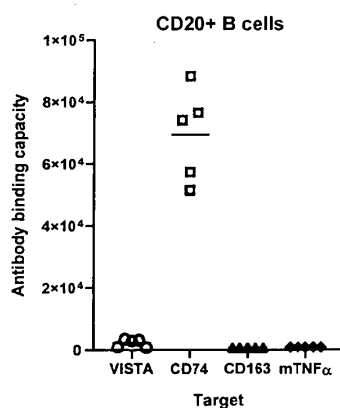
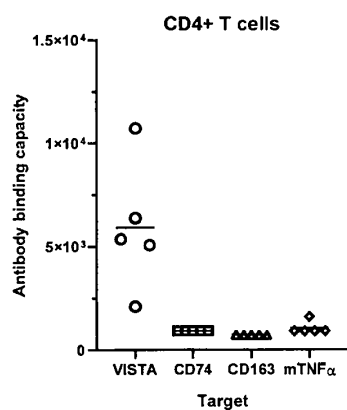
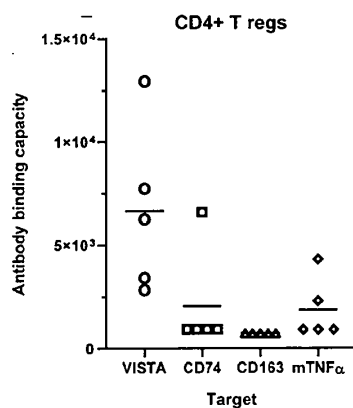
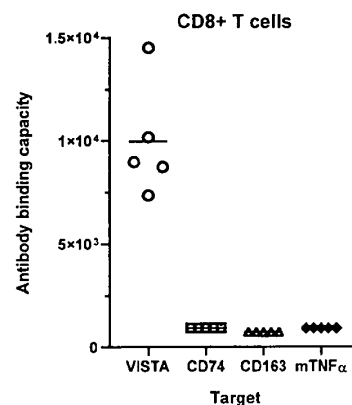
FIG. 103A**FIG. 103B****FIG. 103C****FIG. 103D****FIG. 103E**

Figure 103A-E: Quantification of antigen density for VISTA, CD74, CD163 and mTNF α on identified cell populations A) monocytes express VISTA, CD74 and CD163; B) B cells express CD74; C) CD4+ T cells, D) CD4+ T regs and E) CD8+ T cells express VISTA (mean $\pm$ SD, n=5 donors).

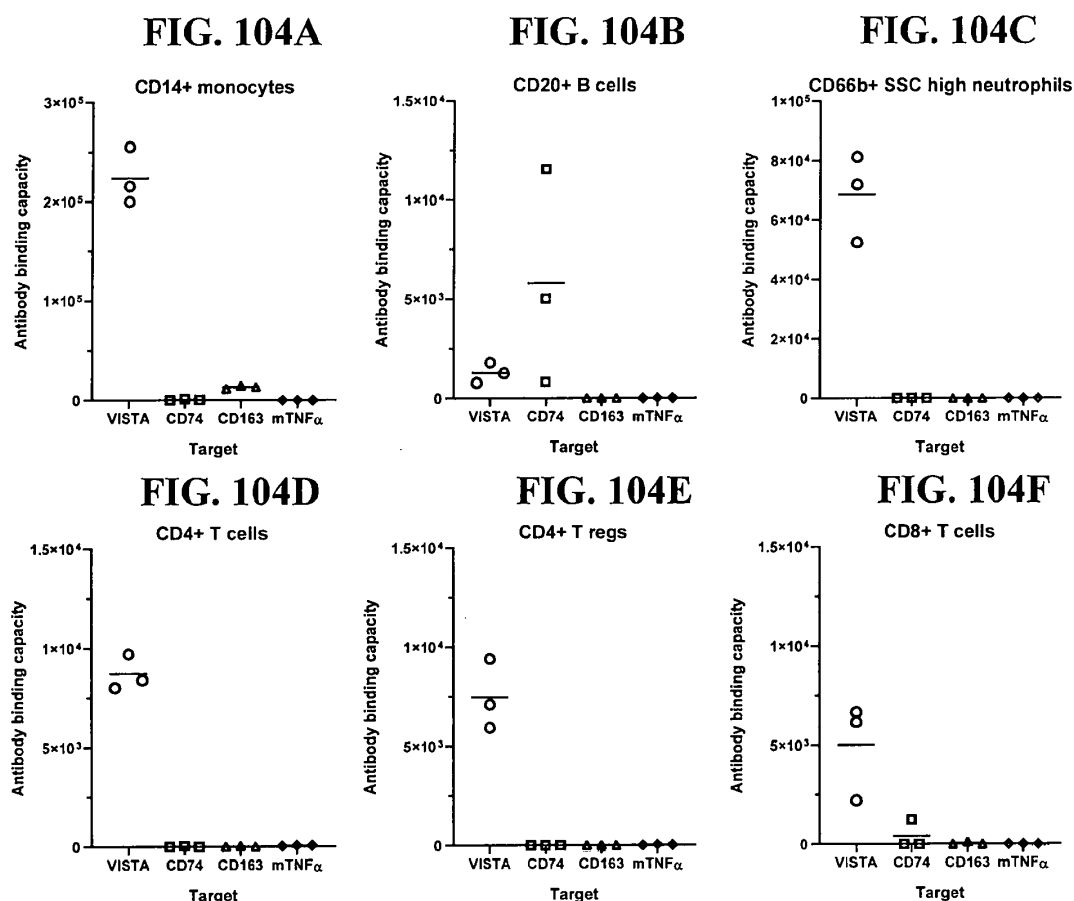


Figure 104A-F: Quantification of antigen density for VISTA, CD74, CD163 and mTNF α on identified cell populations in human blood A) monocytes express VISTA, CD74 and CD163; B) B cells express CD74; C) neutrophils express VISTA, D) CD4⁺ T cells, E) CD4⁺ T regs and F) CD8⁺ T cells express VISTA (mean $\pm$ SD, n=3).

FIG. 105

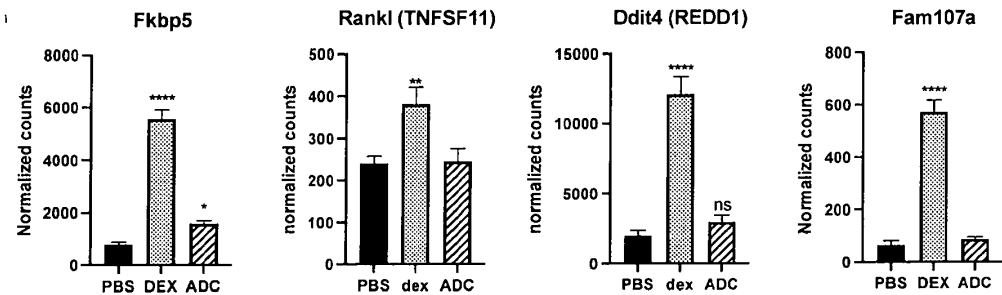


Figure 105: Steroid responsive genes in bone are significantly impacted by Dex. INX231P has limited impact. Fkbp5 (left) RANKL (middle left) ddit4 (middle right) Fam107a (right). INX231P effects were measured at 20h post 1 single i.p. injection at 10 mg/Kg (delivering 0.2 mg/Kg of payload). Dex effects were measured 2h post a single i.p. injection at 2 mg/Kg. Gene transcription levels were measured by RNAseq and presented as normalized counts. (n=5 mice/group; ordinary one-way ANOVA as compared to PBS-only group).

FIG. 106

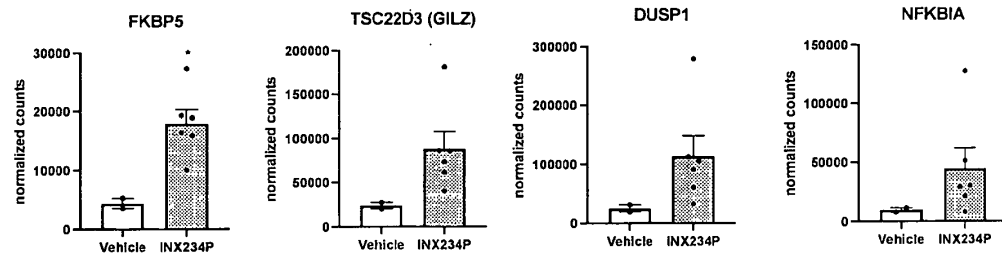


Figure 106: Induction by ADC relative to vehicle control of steroid responsive gene expression in peripheral blood cells in cynomolgus monkey. INX234P effects were measured at 24h post 1 single i.v. dose at 10 mg/Kg (delivering 0.2 mg/Kg of payload). Gene transcription levels were measured by RNAseq and presented as normalized counts. (n=2 vehicle, n=6 ADC/group; unpaired t test vs vehicle).

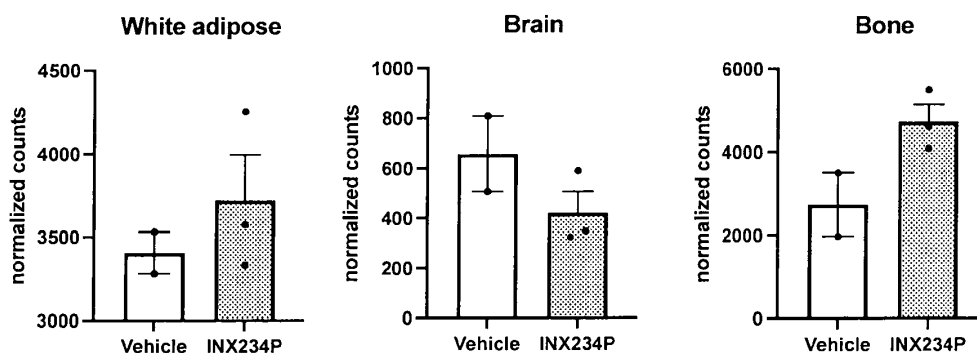
FIG. 107

Figure 107: Limited to no impact of FKBP5 in white adipose, brain and bone. INX234P effects were measured at 24h post 1 single i.v. dose at 10 mg/Kg (delivering 0.2 mg/Kg of payload) or D8 (vehicle). Gene transcription levels were measured by RNAseq and presented as normalized counts. (n=2 vehicle, n=3 ADC/group for tissues; unpaired t test vs vehicle – INX234P was non significant).

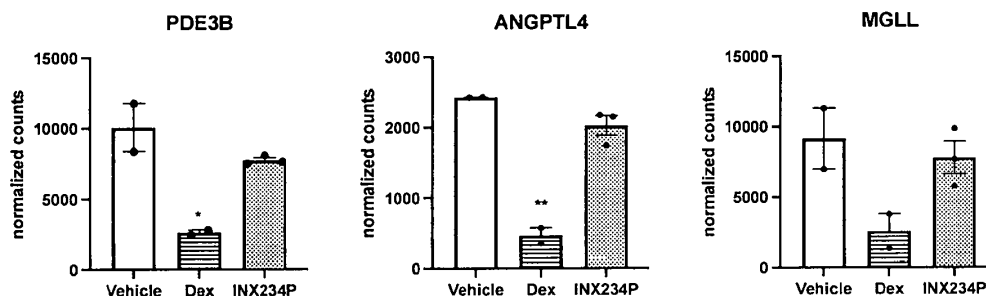
FIG. 108

Figure 108: Steroid responsive genes may show residual Dex effect at 24h in white adipose tissue; ADC gene expression is similar to vehicle control. Free Dex (2mg/Kg) and INX234P (10 mg/Kg - delivering 0.2 mg/Kg of payload) effects were measured at 24h post 1 single i.v. dose or day 8 (vehicle). Gene transcription levels were measured by RNAseq and presented as normalized counts. (n=2 vehicle, n=2 dexamethasone, n=3 ADC/group for tissues; unpaired t test vs vehicle).

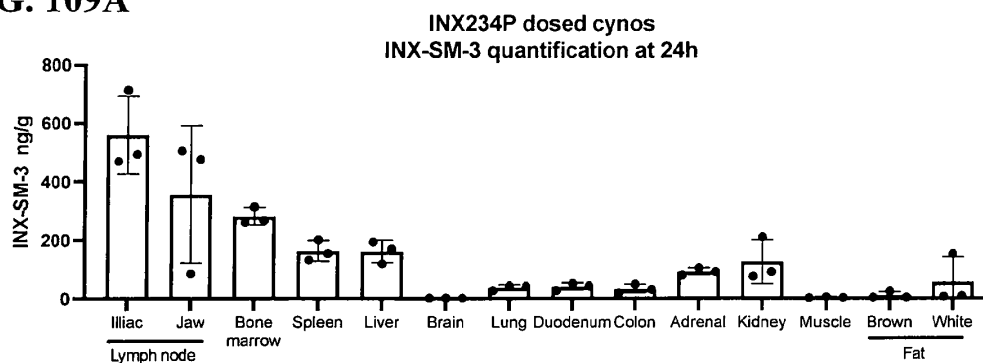
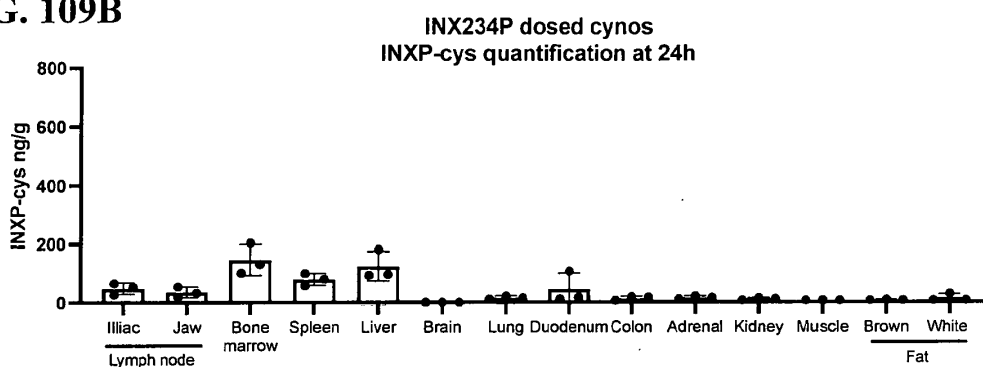
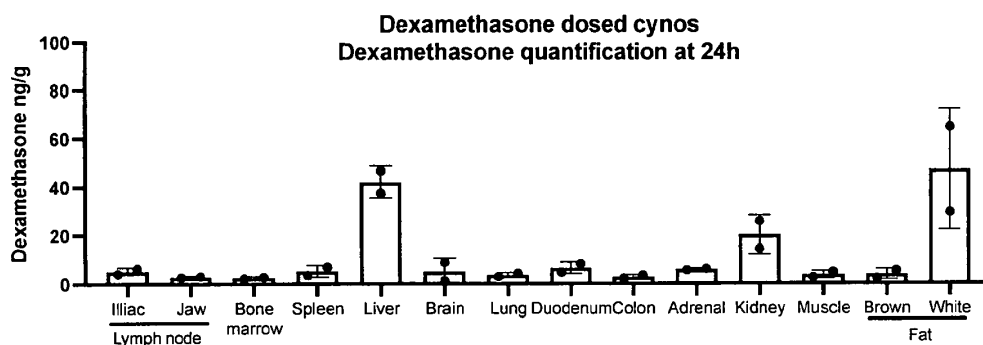
FIG. 109A**FIG. 109B****FIG. 109C**

Figure 109A-C High accumulation of active payload (INX-SM-3) at 24h in INX234P treated monkeys correlates with VISTA expressing tissues. (A) Released payload (INX-SM-3), or (B) cysteine modified linker/payload (INXP-cys) or (C) Dexamethasone, was measured at 24h post 1 single i.v. dose of either INX234P (10mg/kg – delivering 0.2mg/Kg of payload) or free dexamethasone (2mg/kg). Accumulated compound levels were measured by LC-MS/MS and presented as ng of compound/g of tissue (n=3 ADC/group for tissues, n=2 dexamethasone).

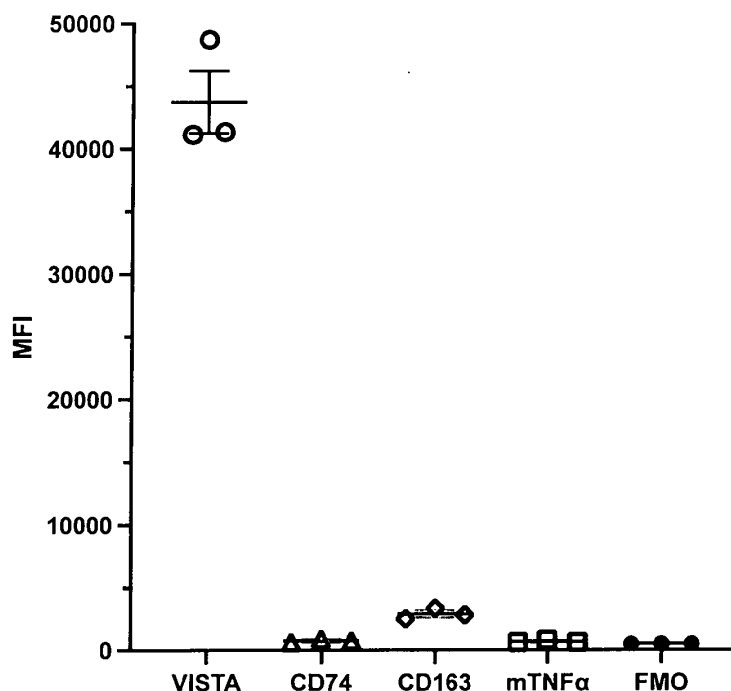
FIG. 110

Figure 110: Human whole blood from healthy donors was activated with LPS (100 μ L per well in U bottom 96 well plate; 1 μ g/mL LPS; 2hr at 37C). Cell surface protein expression levels on activated monocytes was assessed by flow cytometry. Directly conjugated antibodies were used for staining including anti-VISTA clone GG8, CD163 clone GHI/61, CD74 clone 332516, and mTNF α clone mAb11. VISTA expression on the activated monocytes was similar to expression levels observed on non-activated cells. By contrast the protein expression levels of the other detected antigens (CD74, CD163, mTNF α) were low. Particularly the results indicate that mTNF α MFI was only marginally higher than the FMO control.

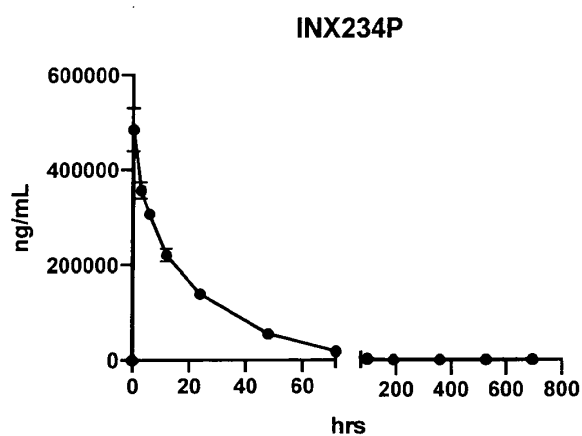
FIG. 111

Figure 111: INX234P PK analysis. INX234P was dosed i.v. at 15 mg/Kg. Animals were bled at the time points indicated, serum was isolated and antibody levels measured (n=4 cynomolgus monkeys, SEM).

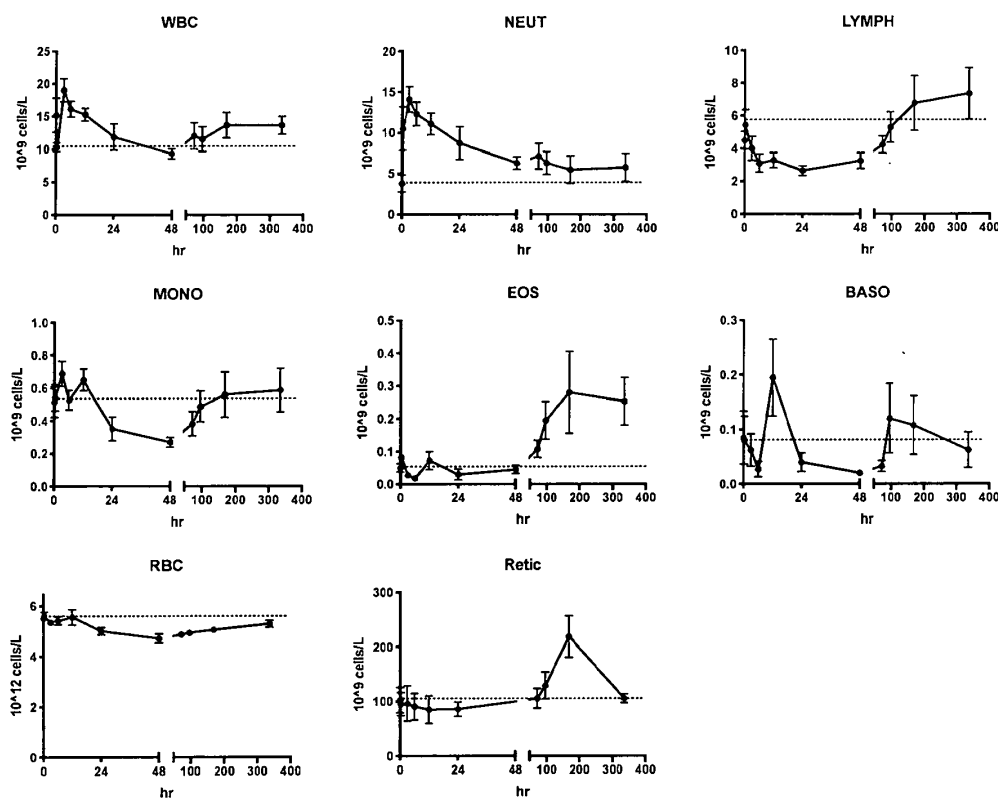
FIG. 112

Figure 112: Hematological changes induced by one dose of INX234P. INX234P was dosed i.v. at 15 mg/Kg. Animals were bled at the time points indicated, blood smear done and different cell populations counted (n=4 cynomolgus monkeys, SEM) (WBC= white blood cells, NEUT= neutrophils, LYMPH= lymphocytes, MONO= monocytes, EOS= eosinophils, BASO= basophils, RBC= red blood cells, Retic= reticulocytes).

FIG. 113

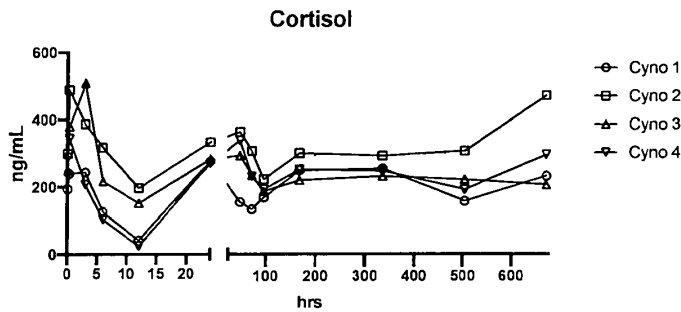


Figure 113: Cortisol changes induced by one dose of INX234P in individual animals. INX234P was dosed i.v. at 15 mg/Kg. Animals were bled at the time points indicated, serum isolated and cortisol levels measured by ELISA (n=4 cynomolgus monkeys).

FIG. 114

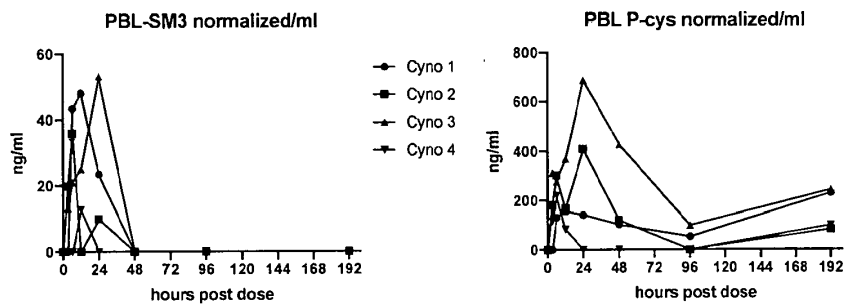


Figure 114: PK of linker payload (P-cys) and released payload (SM3) in PBL. INX234P was dosed i.v. at 15 mg/Kg. Animals were bled at the time points indicated, PBL isolated and analyzed by MS (n=4 cynomolgus monkeys, SEM).

FIG. 115

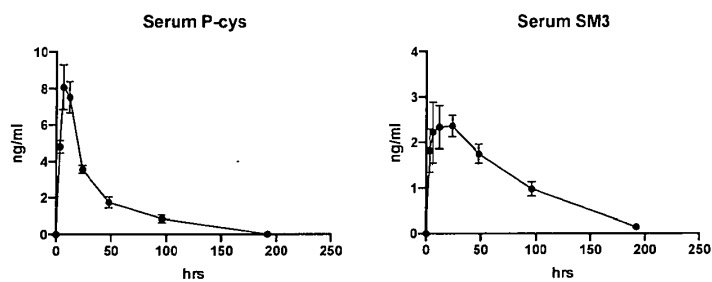


Figure 115: PK of linker payload (P-cys) and released payload (SM3) in serum. INX234P was dosed i.v. at 15 mg/Kg. Animals were bled at the time points indicated, serum isolated and analyzed by MS (n=4 cynomolgus monkeys, SEM).

FIG. 116

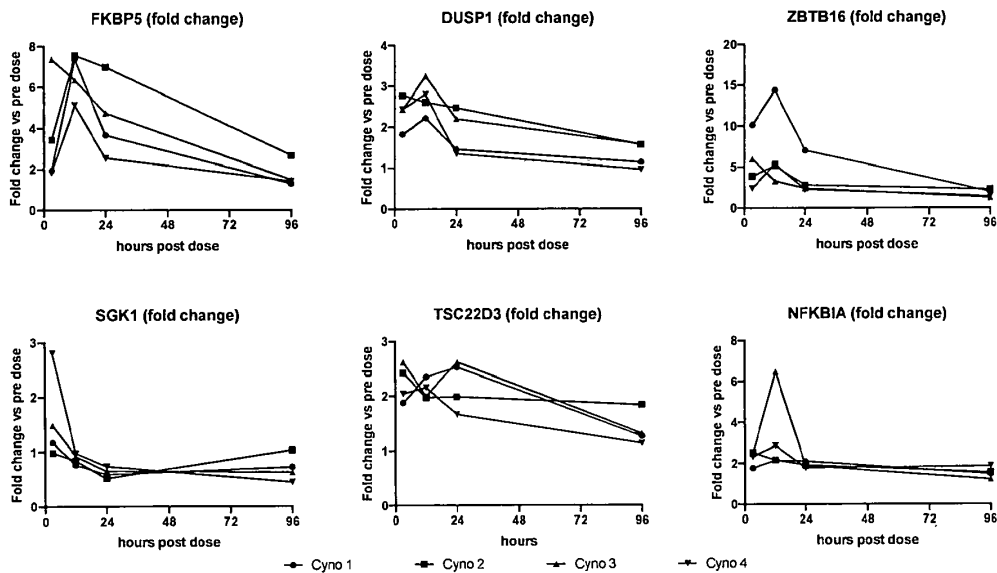


Figure 116: Steroid responsive genes in PBL are upregulated by INX234P. INX234P was dosed i.v. at 15 mg/Kg. Animals were bled at the time points indicated, PBL isolated and subjected to RNA isolation, gene transcription levels were measured by RNAseq and are presented as fold changes vs pre-bleed (n=4 cynomolgus monkeys).

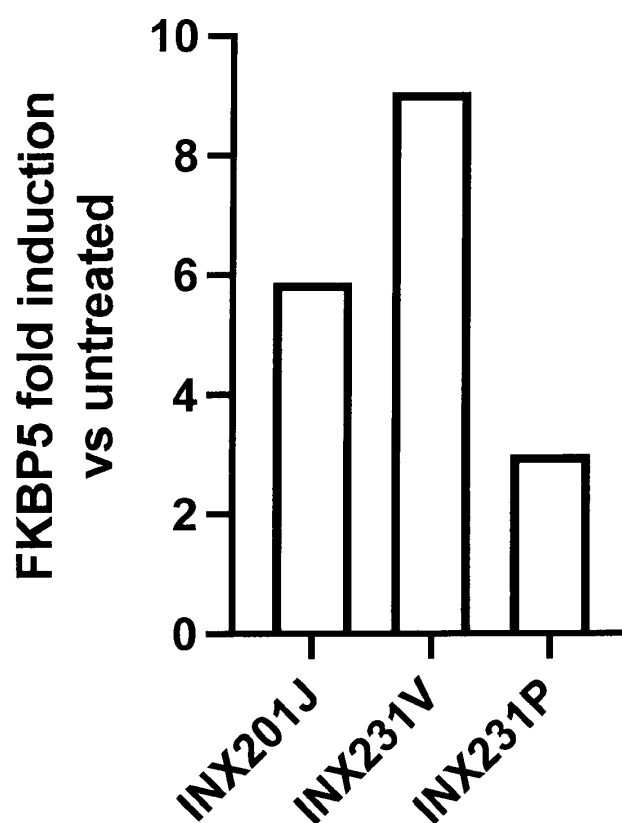
FIG. 117

Figure 117: INX201J, INX231P and INX231V induce FKBP5 in human PBMC by 4h. FKBP5 induction in human PBMC incubated with 1 μ M conjugated payload at 4h as measured by RT PCR relative to GAPDH. n=1 donor.

FIGURE 118A

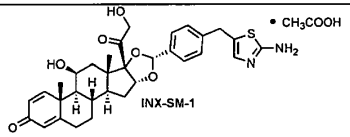
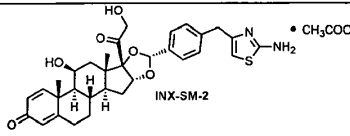
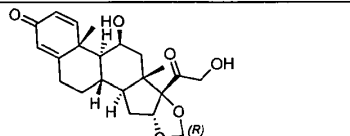
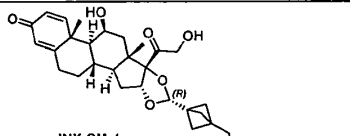
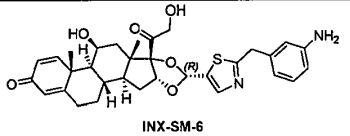
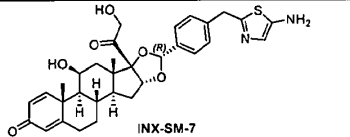
INX-SM-1	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((2-aminothiazol-5-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one AcOH salt	
INX-SM-2	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((2-aminothiazol-4-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one AcOH salt	
INX-SM-3	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((3-aminobicyclo[1.1.1]pentan-1-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-4	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(3-(3-aminobenzyl)bicyclo[1.1.1]pentan-1-yl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-6	((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(2-(3-aminobenzyl)thiazol-5-yl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-7	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((5-aminothiazol-2-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	

FIGURE 118B

INX-SM-9	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((4-aminocuban-1-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-10	(6aR, 6bS, 7S, 8aS, 8bS, 11aR, 12aS, 12bS)-10-(4-((4-aminobicyclo[2.2.2]octan-1-yl) methyl) phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a, 8a-dimethyl-1, 2, 6a, 6b, 7, 8, 8a, 8b, 11a, 12, 12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-11	S-(cyanomethyl) (2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((6-aminospiro[3.3]heptan-2-yl)methyl)phenyl)-2,6b-difluoro-7-hydroxy-6a,8a-dimethyl-4-oxo-1,2,4,6a,6b,7,8,8a,11a,12,12a,12b-dodecahydro-8bH-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxole-8b-carbothioate 2,2,2-trifluoroacetate	
INX-SM-13	(6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((3-aminobicyclo[1.1.1]pentan-1-yl)methyl)phenyl)-6b-fluoro-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-14	(2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-(((1r,4R)-4-aminocyclohexyl)methyl)phenyl)-2,6b-difluoro-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-15	(2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-(((1s,4S)-4-aminocyclohexyl)methyl)phenyl)-2,6b-difluoro-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	

FIGURE 118C

INX-SM-16	(6aR,6bS,7S,8aS,8bS,11aR,12aS,12bS)-10-(4-((3-aminobicyclo[1.1.1]pentan-1-yl)methyl)benzoyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,6a,6b,7,8,8a,8b,9,10,11,11a,12,12a,12b-tetradecahydronaphtho[2',1':4,5]indeno[1,2-c]pyrrol-4(2H)-one	
INX-SM-17	(6aR,6bS,7S,8aS,8bS,11aR,12aS,12bS)-10-(4-((3-aminobicyclo[1.1.1]pentan-1-yl)methyl)benzyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,6a,6b,7,8,8a,8b,9,10,11,11a,12,12a,12b-tetradecahydronaphtho[2',1':4,5]indeno[1,2-c]pyrrol-4(2H)-one	
INX-SM-18	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((4-aminocyclohexyl)oxy)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one 2,2,2-trifluoroacetate	
INX-SM-21	6-(4((2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-2,6b-difluoro-7-hydroxy-6a,8a-dimethyl-4-oxo-8b-(2-(phosphonoxy)acetyl)-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)spiro[3.3]heptan-2-aminium 2,2,2-trifluoroacetate	
INX-SM-24	(2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((3-aminobicyclo[1.1.1]pentan-1-yl)methyl)phenyl)-2,6b-difluoro-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-25	(2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((6-aminospiro[3.3]heptan-2-yl)methyl)phenyl)-2,6b-difluoro-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	

FIGURE 118D

INX-SM-28	(2S,6aS,6bR,7S,8aS,8bS,11aR,12aS,12bS)-10-(4-(3-aminobenzyl)phenyl)-2,6b-difluoro-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,6a,6b,7,8,8a,8b,9,10,11,11a,12,12a,12b-tetradecahydronaphtho[2',1':4,5]indeno[1,2-c]pyrrol-4(2H)-one	
INX-SM-31	(6aR,6bS,7S,8aS,8bS,11aR,12aS,12bS)-10-(4-((5-oxa-2-azaspiro[3.4]octan-7-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-32	(6aR,6bS,7S,8aS,8bS,11aR,12aS,12bS)-10-(4-((6-aminospiro[3.3]heptan-2-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-33	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((3-aminooxetan-3-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one (INX-SM-33)	
INX-SM-34	(6aR,6bS,7S,8aS,8bS,11aR,12aS,12bS)-10-(4-((3-aminobicyclo[1.1.1]pentan-1-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,6a,6b,7,8,8a,8b,9,10,11,11a,12,12a,12b-tetradecahydronaphtho[2',1':4,5]indeno[1,2-c]pyrrol-4(2H)-one 2,2,2-trifluoroacetate	
INX-SM-35	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((1-amino-3,3-difluorocyclobutyl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	

FIGURE 118E

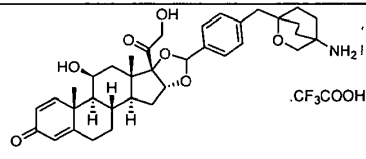
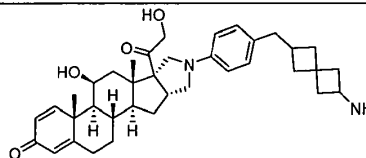
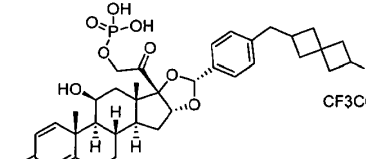
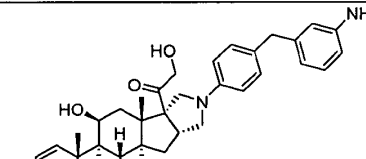
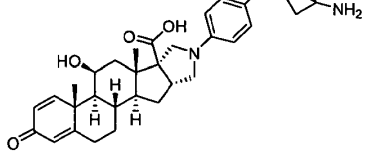
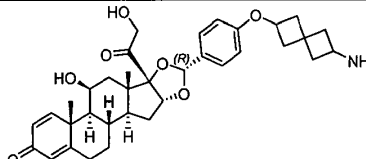
INX-SM-36	(6aR,6bS,7S,8aS,8bS,11aR,12aS,12bS)-10-(4-((4-amino-2-oxabicyclo[2.2.2]octan-1-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one 2,2,2-trifluoroacetate	
INX-SM-37	(6aR,6bS,7S,8aS,8bS,11aR,12aS,12bS)-10-(4-((6-aminospiro[3.3]heptan-2-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,6a,6b,7,8,8a,8b,9,10,11,11a,12,12a,12b-tetradecahydronaphtho[2',1':4,5]indeno[1,2-c]pyrrol-4(2H)-one	
INX-SM-38	6-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-6a,8a-dimethyl-4-oxo-8b-(2-(phosphonoxy)acetyl)-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)spiro[3.3]heptan-2-aminium 2,2,2-trifluoroacetate	
INX-SM-40	(6aR,6bS,7S,8aS,8bS,11aR,12aS,12bS)-10-(4-(3-aminobenzyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,6a,6b,7,8,8a,8b,9,10,11,11a,12,12a,12b-tetradecahydronaphtho[2',1':4,5]indeno[1,2-c]pyrrol-4(2H)-one	
INX-SM-42	(6aR,6bS,7S,8aS,8bS,11aR,12aS,12bS)-10-(4-((3-aminobicyclo[1.1.1]pentan-1-yl)methyl)phenyl)-7-hydroxy-6a,8a-dimethyl-4-oxo-1,4,6a,6b,7,8,8a,9,10,11,11a,12,12a,12b-tetradecahydronaphtho[2',1':4,5]indeno[1,2-c]pyrrole-8b(2H)-carboxylic acid compound with 2,2,2-trifluoroacetic acid	
INX-SM-43	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((6-aminospiro[3.3]heptan-2-yl)oxy)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	

FIGURE 118F

INX-SM-44	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((6-aminospiro[3.3]heptan-2-yl)oxy)-2-fluorophenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-45	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((3-aminospiro[3.3]heptan-1-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one 2,2,2-trifluoroacetate	
INX-SM-46	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((6-aminospiro[2.5]octan-1-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one 2,2,2-trifluoroacetate	
INX-SM-47	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-10-(4-((2-azaspiro[3.3]heptan-6-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one 2,2,2-trifluoroacetate	
INX-SM-48	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-10-(4-((octahydrocyclopenta[c]pyrrol-5-yl)methyl)phenyl)-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one 2,2,2-trifluoroacetate	
INX-SM-49	(6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-10-(4-((3-(methylamino)cyclobutyl)methyl)phenyl)-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	

FIGURE 118G

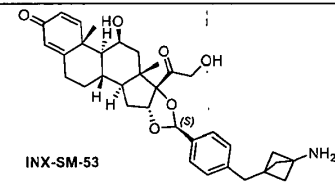
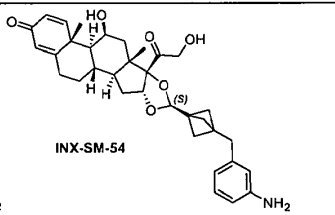
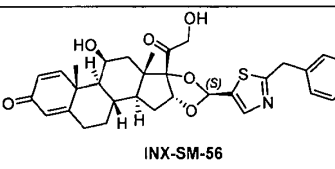
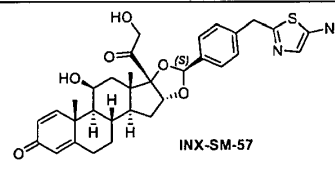
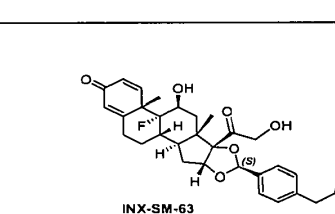
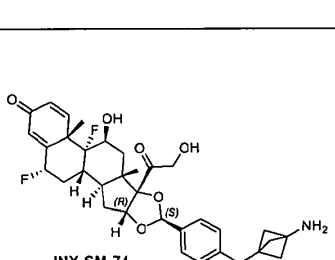
INX-SM-53	(6aR,6bS,7S,8aS,8bS,10S,11aR,12aS,12bS)-10-(4-((3-aminobicyclo[1.1.1]pentan-1-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-54	(6aR,6bS,7S,8aS,8bS,10S,11aR,12aS,12bS)-10-(3-(3-aminobenzyl)bicyclo[1.1.1]pentan-1-yl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-56	(6aR,6bS,7S,8aS,8bS,10S,11aR,12aS,12bS)-10-(2-(3-aminobenzyl)thiazol-5-yl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-57	(6aR,6bS,7S,8aS,8bS,10S,11aR,12aS,12bS)-10-(4-((5-aminothiazol-2-yl)methyl)phenyl)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-63	(6aS,6bR,7S,8aS,8bS,10S,11aR,12aS,12bS)-10-(4-((3-aminobicyclo[1.1.1]pentan-1-yl)methyl)phenyl)-6b-fluoro-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	
INX-SM-74	(2S,6aS,6bR,7S,8aS,8bS,10S,11aR,12aS,12bS)-10-(4-((3-aminobicyclo[1.1.1]pentan-1-yl)methyl)phenyl)-2,6b-difluoro-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-1,2,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-4H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-4-one	

FIGURE 118H

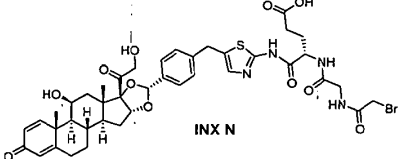
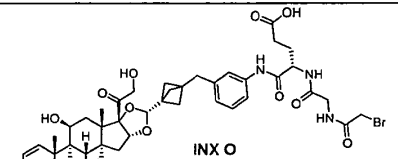
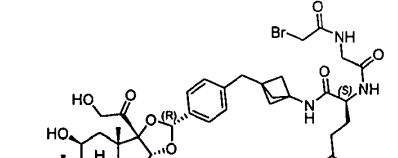
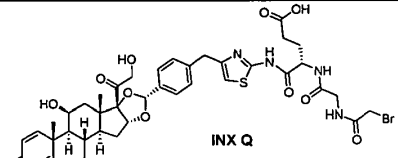
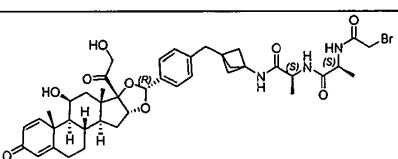
INX N	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((5-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)thiazol-2-yl)amino)-5-oxopentanoic acid	
INX O	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((3-((3-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)bicyclo[1.1.1]pentan-1-yl)methyl)phenyl)amino)-5-oxopentanoic acid	
INX P	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((3-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl) bicyclo[1.1.1]pentan-1-yl)amino)-5-oxopentanoic acid	
INX Q	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((4-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)thiazol-2-yl)amino)-5-oxopentanoic acid	
INX R	(S)-2-(2-bromoacetamido)-N-((S)-1-((3-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl) bicyclo[1.1.1]pentan-1-yl)amino)-1-oxopropan-2-yl)propanamide	

FIGURE 118I

INX S	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((3-(4-((2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-2,6b-difluoro-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)bicyclo[1.1.1]pentan-1-yl)amino)-5-oxopentanoic acid	
INX T	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((3-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-6a,8a-dimethyl-4-oxo-8b-(2-(phosphonoxy)acetyl)-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)bicyclo[1.1.1]pentan-1-yl)amino)-5-oxopentanoic acid	
INX V	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((6-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)spiro[3.3]heptan-2-yl)amino)-5-oxopentanoic acid	
INX W	(S)-6-amino-2-(2-(2-bromoacetamido)acetamido)-N-(3-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)bicycle [1.1.1]pentan-1-yl)hexanamide	
INX X	(S)-2-(2-(2-bromoacetamido)acetamido)-N1-(3-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl) benzyl)bicyclo[1.1.1]pentan-1-yl)succinamide	

FIGURE 118J

INX Y	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((3-(4-((6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-6b-fluoro-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)bicyclo[1.1.1]pentan-1-yl)amino)-5-oxopentanoic acid	
INX Z	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((4-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)bicyclo[2.2.2]octan-1-yl)amino)-5-oxopentanoic acid	
INX A1	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((3,3-difluoro-1-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)cyclobutyl)amino)-5-oxopentanoic acid	
INX A2	(4S)-4-(2-(2-bromoacetamido)acetamido)-5-(((2S,3R,4R,5S)-4-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)cuban-1-yl)amino)-5-oxopentanoic acid	
INX A3	(S)-6-amino-2-(2-(2-bromoacetamido)acetamido)-N-(6-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)spiro[3.3]heptan-2-yl)hexanamide 2,2,2-trifluoroacetate	

FIGURE 118K

INX A4	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((6-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)phenoxy)spiro[3.3]heptan-2-yl)amino)-5-oxopentanoic acid	
INX A5	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((6-(3-fluoro-4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)phenoxy)spiro[3.3]heptan-2-yl)amino)-5-oxopentanoic acid	
INX A6	(S)-6-amino-2-(2-(2-bromoacetamido)acetamido)-N-(6-(4-((2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-2,6b-difluoro-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)spiro[3.3]heptan-2-yl)hexanamide	
INX A7	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((6-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-6a,8a-dimethyl-4-oxo-8b-(2-(phosphonooxy)acetyl)-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)spiro[3.3]heptan-2-yl)amino)-5-oxopentanoic acid	
INX A8	(4S)-4-(2-(2-bromoacetamido)acetamido)-5-((3-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)spiro[3.3]heptan-1-yl)amino)-5-oxopentanoic acid	

FIGURE 118L

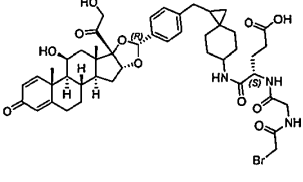
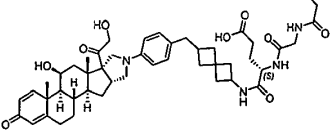
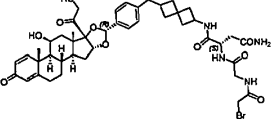
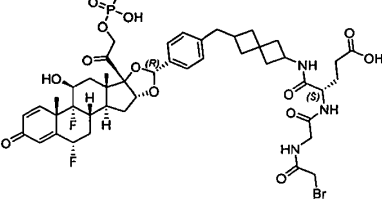
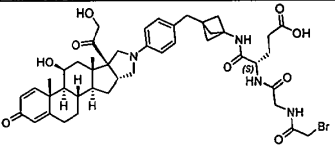
INX A9	(4S)-4-(2-(2-bromoacetamido)acetamido)-5-((1-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)spiro[2.5]octan-6-yl)amino)-5-oxopentanoic acid	
INX A10	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((6-(4-((6aR,6bS,7S,8aS,8bS,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-1,4,6a,6b,7,8,8a,8b,9,11,11a,12,12a,12b-tetradecahydronaphtho[2',1':4,5]indeno[1,2-c]pyrrol-10(2H)-yl)benzyl)spiro[3.3]heptan-2-yl)amino)-5-oxopentanoic acid	
INX A11	(S)-2-(2-(2-bromoacetamido)acetamido)-N1-(6-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)spiro[3.3]heptan-2-yl)succinamide	
INX A12	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((6-(4-((2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-2,6b-difluoro-7-hydroxy-6a,8a-dimethyl-4-oxo-8b-(2-(phosphonooxy)acetyl)-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)spiro[3.3]heptan-2-yl)amino)-5-oxopentanoic acid	
INX A13	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((3-(4-((6aR,6bS,7S,8aS,8bS,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-1,4,6a,6b,7,8,8a,8b,9,11,11a,12,12a,12b-tetradecahydronaphtho[2',1':4,5]indeno[1,2-c]pyrrol-10(2H)-yl)benzyl)bicyclo[1.1.1]pentan-1-yl)amino)-5-oxopentanoic acid	

FIGURE 118M

INX A14	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((3-(4-((2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-2,6b-difluoro-7-hydroxy-6a,8a-dimethyl-4-oxo-8b-(2-(phosphonooxy)acetyl)-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)bicyclo[1.1.1]pentan-1-yl)amino)-5-oxopentanoic acid	
INX A15	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((6-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-6a,8a-dimethyl-4-oxo-8b-(2-(phosphonooxy)acetyl)-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)phenoxy)spiro[3.3]heptan-2-yl)amino)-5-oxopentanoic acid	
INX A16	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((6-(4-((2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-2,6b-difluoro-7-hydroxy-6a,8a-dimethyl-4-oxo-8b-(2-(phosphonooxy)acetyl)-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)phenoxy)spiro[3.3]heptan-2-yl)amino)-5-oxopentanoic acid	
INX A17	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((6-(3-fluoro-4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)phenoxy)spiro[3.3]heptan-2-yl)amino)-5-oxopentanoic acid	

FIGURE 118N

INX A18	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((6-(4-((2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-2,6b-difluoro-7-hydroxy-6a,8a-dimethyl-4-oxo-8b-(2-(phosphonooxy)acetyl)-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)-3-fluorophenoxy)spiro[3.3]heptan-2-yl)amino)-5-oxopentanoic acid	
INX A19	(S)-4-(2-(2-bromoacetamido)acetamido)-5-(6-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)-2-azaspiro[3.3]heptan-2-yl)-5-oxopentanoic acid	
INX A20	(4S)-4-(2-(2-bromoacetamido)acetamido)-5-(5-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)hexahydrocyclopenta[c]pyrrol-2(1H)-yl)-5-oxopentanoic acid	
INX A21	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((3-(4-((6aR,6bS,7S,8aS,8bS,10R,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)cyclobutyl)(methyl)amino)-5-oxopentanoic acid	
INX A23	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((6-(4-((2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-2,6b-difluoro-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)spiro[3.3]heptan-2-yl)amino)-5-oxopentanoic acid	

FIGURE 1180

INX A24	((4S)-4-(2-(2-bromoacetamido)acetamido)-5-((1-(4-((6aR,6bS,7S,8aS,8bS,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)-2-oxabicyclo[2.2.2]octan-4-yl)amino)-5-oxopentanoic acid	
INX A25	(4S)-4-(2-(2-bromoacetamido)acetamido)-5-((1-(4-((6aR,6bS,7S,8aS,8bS,11aR,12aS,12bS)-7-hydroxy-6a,8a-dimethyl-4-oxo-8b-(2-(phosphonoxy)acetyl)-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)-2-oxabicyclo[2.2.2]octan-4-yl)amino)-5-oxopentanoic acid	
INX A27	(S)-4-(2-(2-bromoacetamido)acetamido)-5-(((1R,4S)-4-(4-((2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-2,6b-difluoro-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)cyclohexyl)amino)-5-oxopentanoic acid	
INX A28	(S)-4-(2-(2-bromoacetamido)acetamido)-5-(((1S,4R)-4-(4-((2S,6aS,6bR,7S,8aS,8bS,10R,11aR,12aS,12bS)-2,6b-difluoro-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-2,4,6a,6b,7,8,8a,8b,11a,12,12a,12b-dodecahydro-1H-naphtho[2',1':4,5]indeno[1,2-d][1,3]dioxol-10-yl)benzyl)cyclohexyl)amino)-5-oxopentanoic acid	
INX A29	(S)-4-(2-(2-bromoacetamido)acetamido)-5-((3-(4-((6aR,6bS,7S,8aS,8bS,11aR,12aS,12bS)-7-hydroxy-8b-(2-hydroxyacetyl)-6a,8a-dimethyl-4-oxo-1,4,6a,6b,7,8,8a,8b,9,11,11a,12,12a,12b-tetradecahydronaphtho[2',1':4,5]indeno[1,2-c]pyrrol-10(2H)-yl)benzyl)phenyl)amino)-5-oxopentanoic acid	

FIG. 119

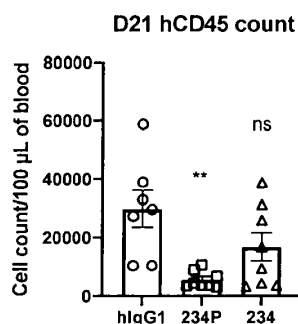


Figure 119: INX234P treatment reduces human PBMC expansion. Peripheral blood was collected on day 21 and human CD45 positive cells quantified by flow cytometry. Mice were dosed once a week from day 0 to day 34 (SEM; n=8/group) (Dosing at 10 mg/Kg, INX234P provided 0.2mg/kg of INX P linker payload).

FIG. 120

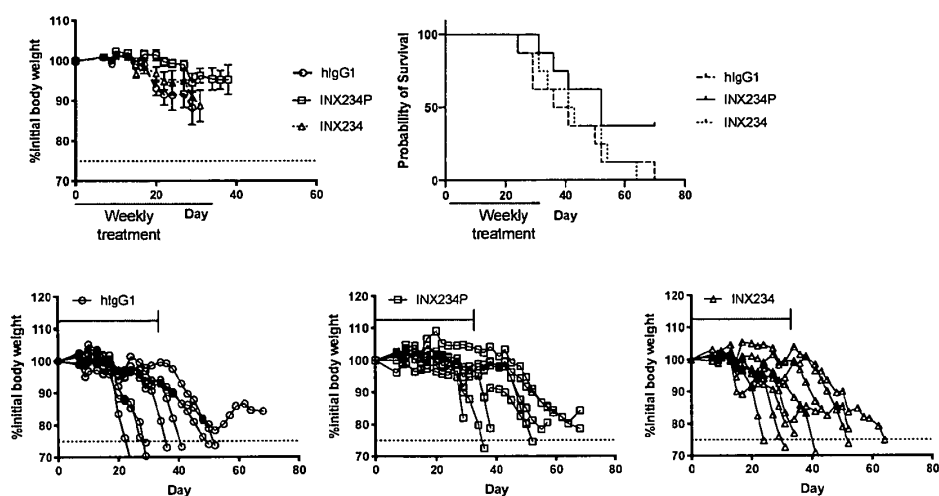


Figure 120: INX234P treatment improves mouse survival. Mice were dosed i.p. at 10 mg/Kg (or 0.2 mg/Kg of INX P linker payload) once a week from day 0 to day 34. Upper left graph shows the mean weight changes as percentage of initial body weight; the 3 bottom graphs show the individual mice % of weight loss; the right upper graph is a Kaplan-Meier survival curve; the grey bar above (lower graphs) or below (upper graphs) indicates the treatment period (SEM; n=8/group).

FIG. 121

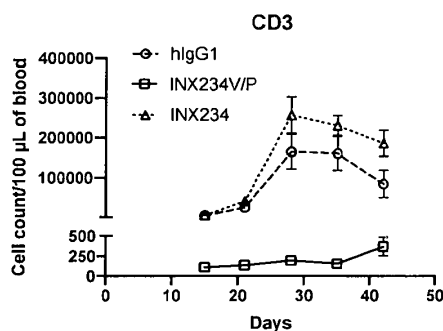


Figure 121: INX234V/P treatment reduces human T cell expansion. Peripheral blood was collected weekly starting on day 15 post transfer and human CD45+ CD3+ positive cells were quantified by flow cytometry. Mice were dosed once a week from day 0 (SEM; n=8/group) (Dosing at 10 mg/Kg, INX234V and INX234P provided 0.2mg/kg of INX V or INX P linker payload respectively).

FIG. 122

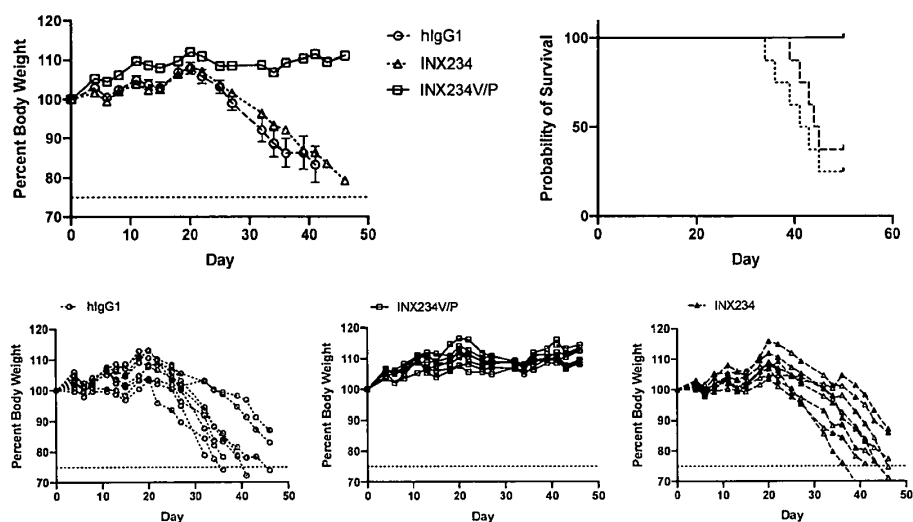


Figure 122: INX234V/P treatment improves mouse survival. Mice were dosed i.p. at 10 mg/Kg (or 0.2 mg/Kg of INX V or INX P linker payload) once a week starting on day 0. Upper left graph shows the mean weight changes as percentage of initial body weight; the 3 bottom graphs show the individual mice % of weight loss; the right upper graph is a Kaplan-Meier survival curve.

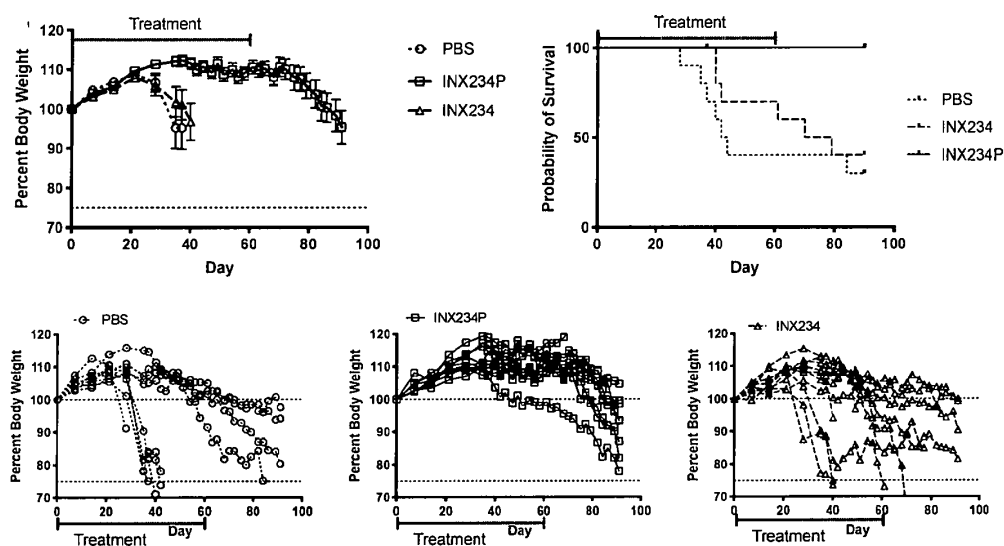
FIG. 123

Figure 123: INX234P treatment improves mouse survival. Mice were dosed i.p. at 10 mg/Kg (and 0.2 mg/Kg of INX P linker payload where applicable) for both INX234P and INX234, once a week from day 0 to day 61. Upper left graph shows the mean weight changes as percentage of initial body weight; the 3 bottom graphs show the individual mice % of weight loss; the right upper graph is a Kaplan-Meier survival curve; the grey bar above (lower graphs) or below (upper graphs) indicates the treatment period (SEM; n=10/group except the INX234P group with n=9).

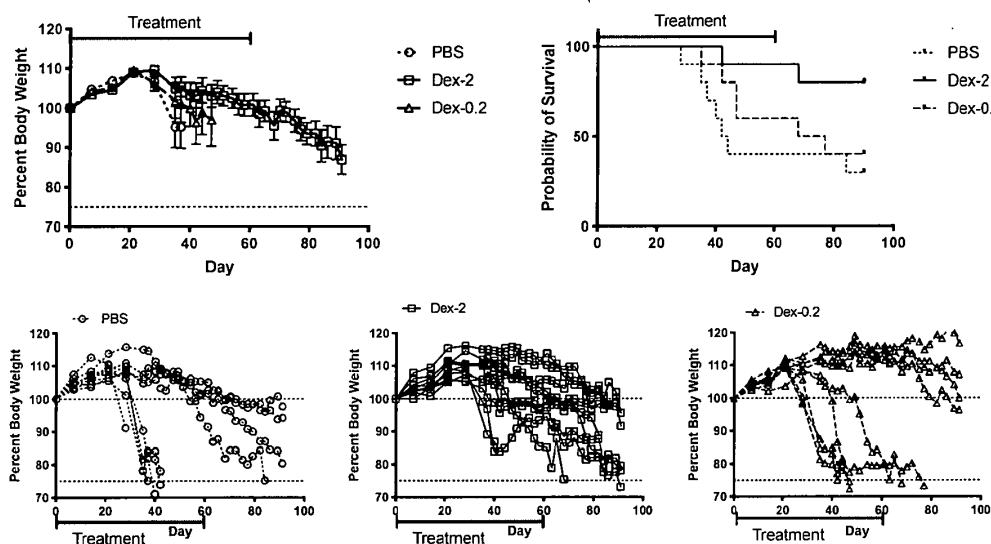
FIG. 124

Figure 124: High dose dexamethasone treatment improves mouse survival. Mice were dosed i.p. at 2 (high) or 0.2 (low) mg/Kg once a week from day 0 to day 61. Upper left graph shows the mean weight changes as percentage of initial body weight; the 3 bottom graphs show the individual mice % of weight loss; the right upper graph is a Kaplan-Meier survival curve; the grey bar above (lower graphs) or below (upper graphs) indicates the treatment period (SEM; n=10/group).

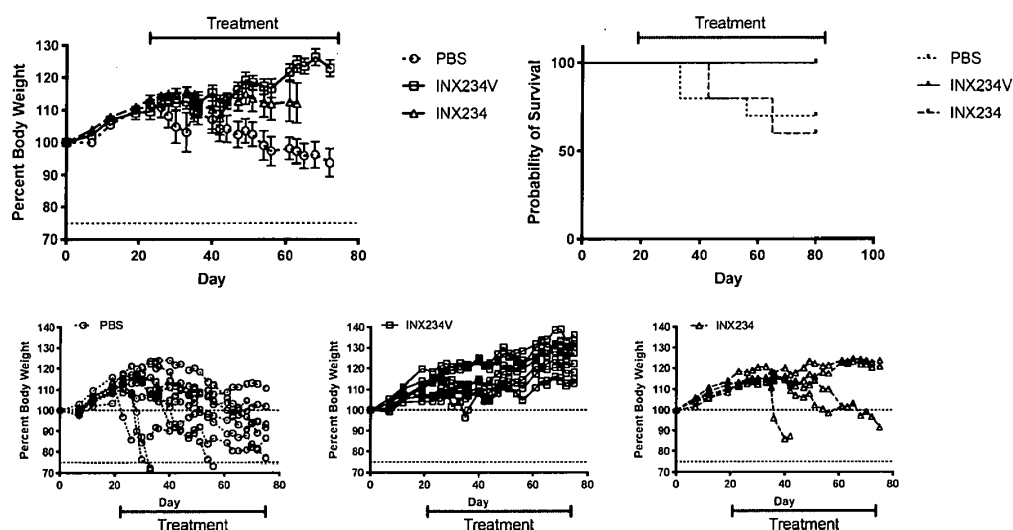
FIG. 125

Figure 125: INX234V treatment improves mouse survival. Mice were dosed i.p. at 10 mg/Kg (and 0.2 mg/Kg of INX V linker payload where applicable) for both INX234V and INX234 once a week from day 21 to day 80. Upper left graph shows the mean weight changes as percentage of initial body weight; the 3 bottom graphs show the individual mice % of weight loss; the right upper graph is a Kaplan-Meier survival curve; the grey bar above (lower graphs) or below (upper graphs) indicates the treatment period (SEM; n=10/group except for INX234 treated group where n=5).

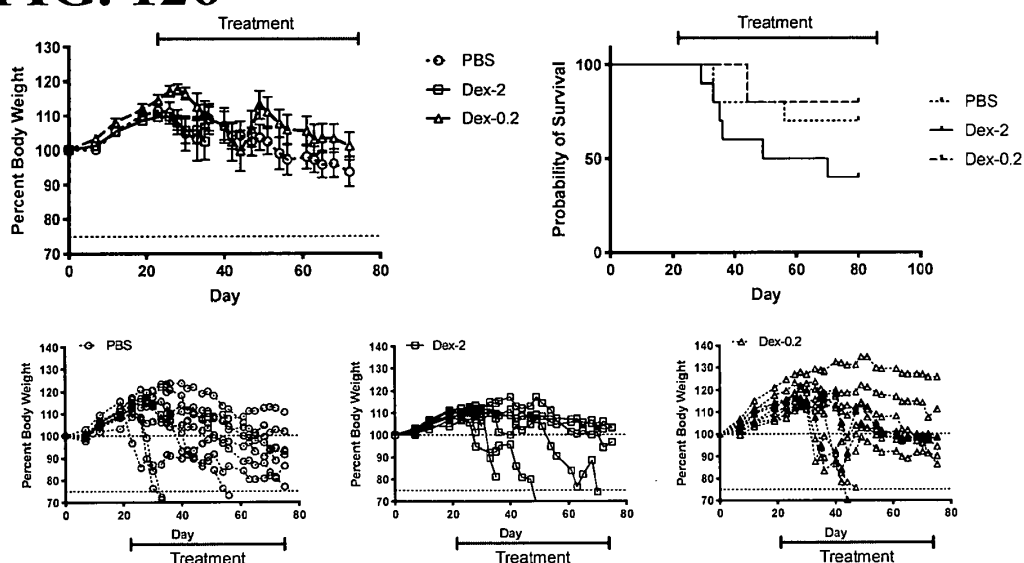
FIG. 126

Figure 126: Low dose dexamethasone treatment improves mouse survival. Mice were dosed i.p. at 2 (high) or 0.2 (low) mg/Kg once a week from day 21 to day 80. Upper left graph shows the mean weight changes as percentage of initial body weight; the 3 bottom graphs show the individual mice % of weight loss; the right upper graph is a Kaplan-Meier survival curve; the grey bar above (lower graphs) or below (upper graphs) indicates the treatment period (SEM; n=10/group).

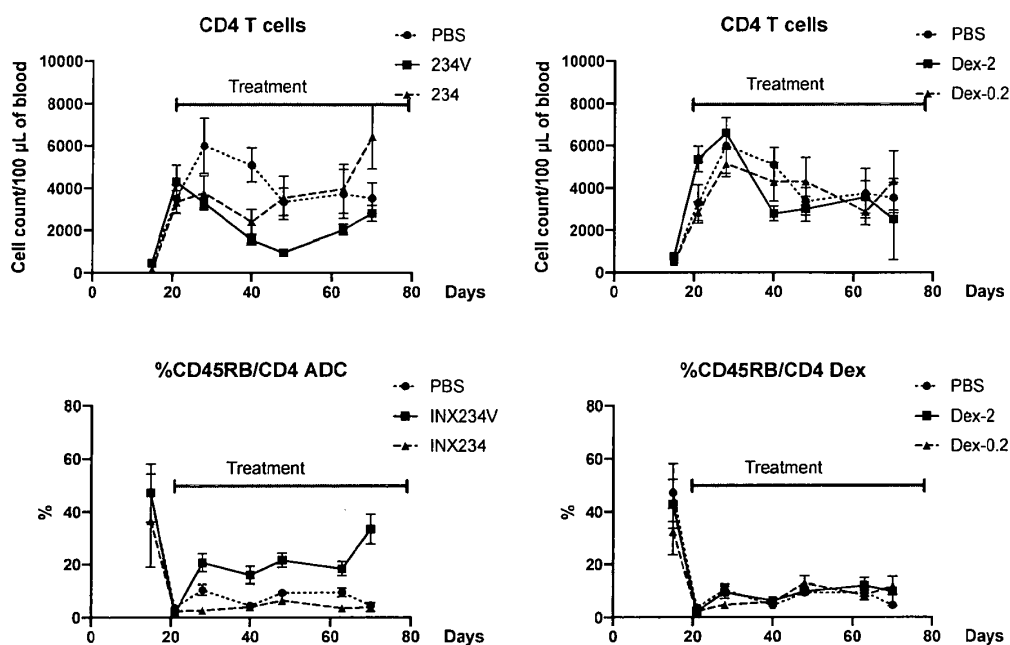
FIG. 127

Figure 127: INX234V treatment prevents T cell expansion and activation. Mice were dosed i.p. at 10 mg/Kg (and 0.2 mg/Kg of V payload where applicable) for INX234V or INX234 and at 2 (high) or 0.2 (low) mg/Kg of Dex once a week from day 21 to day 80. Upper left graphs show naïve T cell number from blood for INX234V and INX234 vs PBS on the left and Dex at high and low doses vs PBS on the right; lower left and right graphs indicate the frequencies of CD45RB+ CD4 T cells for the same groups; the grey bar above indicates the treatment period (SEM; n=10/group except for INX234 treated group where n=5).