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FIG. 1

SEQ ID NO: 1 R2-1_VH

QVQLVESGGGVQPGRSLRLSCAASGFTFSSYGMHWWVRQAPGKGLEWVAVIWFDEDNKDYADSVKGR
FTISRDNSKNTLYLQMSSLRAEDTAVYYCARDNDILTGYYYYYGMDVWGQGTITVTVSS

SYGMH	VIWFDEDNKDYADSVKG	DNDILTGYYYYYGMDV
SEQ: 13	SEQ: 14	SEQ: 15

SEQ ID NO: 2 R2-1_VL

DIQLTQSPSFLSASVGDRVITITCRASQDISSYLAWYQQKPGKAPKLLIYAASTLQSGVPSRFSGSGSGTEF
TLTISSLQPEDFATYYCQQLNSYPPTFGQGTKVEIK

RASQDISSYLA	AASTLQS	QQLNSYPPT
SEQ: 16	SEQ: 17	SEQ: 18

SEQ ID NO: 3 R2-2_VH

QVQLVQSGPEVKKPGASVKVSCASGYTFTNYGISWVRQAPGQGLEWMGWINAYNGNTNYAQKLQGR
VTMTTDTSTSTAYMELRSLRSDDTAVYYCARDGGYGSPTYHNDYYYYYGMVDVWGQGTITVTVSS

NYGIS	WINAYNGNTNYAQKLQG	DGGYGSPTYHNDYYYYYGMVDV
SEQ: 19	SEQ: 20	SEQ: 21

SEQ ID NO: 4 R2-2_VL

EIVLTQSPDFQSMTPEEKVTITCRASQSIGSNLHWYQQKPDQSPKLLIKFASQSIGVPSRFSGSGSGTDF
TLTINSLEAEDAATYYCHQSSSLPFTFGPGTKVDIK

RASQSIGSNLH	FASQSIG	HQSSSLPFT
SEQ: 22	SEQ: 23	SEQ: 24

SEQ ID NO: 5 R2-3_VH

QVQLQESGPGLVKPSSETLSLTCTVSGGSISSYYWSWIRQAPGKGLEWIGYIYYSGSTNYPNPSLKSRTVIS
VDTSKNQFSLKLSSVTAADTAVYYCARDGSSDYGMVDVWGQGTITVTVSS

SYYS	YIYYSGSTNYPNPSLKS	DDGSSDYGMVDV
SEQ: 25	SEQ: 26	SEQ: 27

SEQ ID NO: 6 R2-3_VL

AIQLTQSPSSLSASVGDRVITITCRASQGISSALAWYQQKPGKAPKLLIYDASSLESVPSRFTGSGTDFTL
TISSLQPEDFATYYCQQFNMYTFGQGTKLEIK

RASQGISSALA	DASSL	QQFNMYT
SEQ: 28	SEQ: 29	SEQ: 30

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SEQ ID NO: 7 R2-4_VH

QVQLVQSGAEVRKPGASVKVSKASGYTFTSYSVTWVRQAPGQGLEWMGW^WINAFSGNTHYAQNLQDR
VTMTTDTSTSTAYMELRSLRSDDTAVYYCAREEGSGSYEDYYGMDVWGQGT^TTVTVSS

SYSVT	WINAFSGNTHYAQNLQD	EEGSGSYEDYYGMDV
SEQ: 31	SEQ: 32	SEQ: 33

SEQ ID NO: 8 R2-4_VL

DIVMTQTPLSSPVTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPPRLIYKISNRFSGVPDRFSGS
GAGTDFTLKISRVEAEDVGVIYCMQTTQFPFTFGPGTKVDIK

RSSQSLVHSDGNTYLS	KISNRF	MQTTQFPFT
SEQ: 34	SEQ: 35	SEQ: 36

SEQ ID NO: 9 R2-5_VH

QVQLVQSGAEVKKPGASVTVSCKASGYTFSTYGIWVRQAPGQGLEWMGW^WISAFNGNANSAQKLQDRV
TMTTDTSTSTAYMELRSLRSDDTAVYYCARGEDFFDYWGQGT^LTVTVSS

TYGII	WISAFNGNANSAQKLQD	GEDFFDY
SEQ: 37	SEQ: 38	SEQ: 39

SEQ ID NO: 10 R2-5_VL

DIVMTQTPLSSPVTLGQPASISCRSSQSLVHSDGNTYLSWLQQRPGQPPRLIYKVSSRFSGVPDRFSGS
GAGTDFTLKISRVEAEDVGVIYCTQSTQFPFTFGRGKLEIK

RSSQSLVHSDGNTYLS	KVSSRF	TQSTQFPFT
SEQ: 34	SEQ: 40	SEQ: 41

SEQ ID NO: 11 R2-6_VH

QVQLVQSGAEVKKPGASVKVSKASGYTFLSYGLSWVRQAPGQGLEWMGW^WINAYNGNTNYAQNQLQDR
VTMTTDTSTSTAYMELRSLRSDDMAVYYCARWDILTAYYSSDAFDIWGQGT^MTVTVSS

SYGLS	WINAYNGNTNYAQNQLQD	WDILTAYYSSDAFDI
SEQ: 42	SEQ: 43	SEQ: 44

SEQ ID NO: 12 R2-6_VL

DIVMTQTPLSSPVTLGQPASISCRSSQSLVHSDGNTYLNWLQQRPGQPPRLIYKVS^NRFSGVPDRFSGS
GAGTDFTLKISRVEAEDVGVIYCTQT^TQFPITFGQGT^RLEIK

RSSQSLVHSDGNTYLN	KVSNRF	TQTTQFPIT
SEQ: 45	SEQ: 46	SEQ: 47

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SEQ ID NO: 48 R2-5.1 VH

QVQLVQSGAEVKKPGASVTVSCKASGYTFSTYGIWVRQAPGQGLEWMGWISAFN NANSAQKLQDRV
 TMTTDTSTSTAYMELRSLRSDDTAVYYCARGEDFFDYWGQGLTVTVSS

TYGII	WISAFNSNANSAQKLQD	GEDFFDY
SEQ: 37	SEQ: 49	SEQ: 39

SEQ ID NO: 50 human IgG1 constant domain

ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVT
 VPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE
 EVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSN
 KALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP
 VLDSDGSSFLYSLKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK

SEQ ID NO: 51 human Kappa constant domain

RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYSLS
 STLTLKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

SEQ ID NO:52 >NP_001057.1 tumor necrosis factor receptor superfamily member 1B precursor
[Homo sapiens]

MAPVAVWAALAVGLELWAAHALPAQVAFTPYAPEPGSTCRLREYYDQTAQMCCSKCSPGQHAKVFCTKSDTVCD
 SCEDSTYTQLWNWVPECLSCGSRCSDDQVETQACTREQNRICTCRPGWYCALSKEGCRCLCAPLRKCRPGFGVARPG
 TETSDVCKPCAPGTFSNTTSTDICRPHQICNVVAIPGNASMDAVCTSTSPTRSMAPGAVHLPQPVSTRSQHTQPTPE
 PSTAPSTSFLLPMGPSPPAEGSTGDFALPVGLIVGVTALGLLIIGVVNCVIMTQVKKKPLCLQREAKVPHLPADKARGTQ
 GPEQQHLLITAPSSSSSSLESSASALDRRAPTRNQPAQPGVEASGAGEARASTGSSDSSPGGHGTQVNVTCIVNVCSSS
 DHSSQCSSQASSTMGDTDSSPSESPKDEQVPFSKEECAFRSQLETPETLLGSTEEKPLPLGVDPDAGMKPS

SEQ ID NO:53 >XP_005544817.1 PREDICTED: tumor necrosis factor receptor superfamily member 1B
isoform X1 [Macaca fascicularis]

MAPAAVWAALAVGLELWAAGHALPAQVAFTPYAPEPGGTCRLREYYDQTAQMCCSKCPPGQHAKVFCTKSDTVCD
 DSCEDSTYTQLWNWVPECLSCGSRCSDDQVETQACTREQNRICTCRPGWYCALSKEGCRCLCAQLRKCRPGFGVARP
 GTETSDVCKPCAPGTFSNTTSTDICRPHQICHVVAIPGNASMDAVCTSTSPTRSMAPGAVHLPQPVSTRSQHTQPTPE
 APSTAPGTSFLLPVGPSPPAEGSTGDIVLPVGLIVGVTALGLLIIGVVNCVIMTQVKKKPLCLQRETKVPHLPADKARGAQ
 GPEQQHLLTTPSSSSSSLESSASALDRRAPTRNQPAQGAEKASGAGEARASTGSSADSSPGGHGTQVNVTCIVNVCSS
 SSDHSSQCSSQASSTMGDTDASPSGSPKDEQVPFSKEESAFRSQLETPETLLGSTEEKPLPLGVDPDAGMKPS

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SEQ ID NO:54 >NP_035740.2 tumor necrosis factor receptor superfamily member 1B precursor [Mus musculus]

MAPAALWVALVFELQLWATGHTVPAQVVLTPYKPEPGYECQISQEYYDRKAQMCCAKCPPGQYVKHFCNKTSDTV
ADCEASMYTQVWNQFRTCLSCSSCTTDQVEIRACTKQQRNVCACEAGRYCALKTHSGSCRQCMRLSKCGPGFVAS
SRAPNGNVLCACAPGTFSDDTSSTDVCRPHRCSILAIPGNASTDAVCAPESPTLSAIPRTLVSQPEPTRSQPLDQEPG
PSQTPSILTSLGSTPIEQSTKGGISLPIGLIVGVTSLGLLMLGLVNCIILVQRKKKPSCLQRDAKVPHVPDEKSQDAVGLEQ
QHLLTAPSSSSSSLESSASAGDRRAPPGGHPQARVMAEAQGFQEARASSRISDSSHGSHGTHVNVTCIVNVCSDDHS
SQCSSQASATVGDPAKPSASPKDEQVPFSQEECPSPCETTETLQSHEKPLPLGVPMGMKPSQAGWFDQJAVKV
A

SEQ ID NO:55 >NP_001056.1 tumor necrosis factor receptor superfamily member 1A isoform 1 precursor [Homo sapiens]

MGLSTVPDLLPLVLELLVGIYPSGVIGLVPHLGDREKRDSVCPQGKYIHPQNNISICCTKCHKGTLYNDCPGPGQD
CRECESGSFTASENHLRHCLSCSKCRKEMGQVEISSCTVDRDTCGCRKNQYRHYWSENLFQCFNCSLCLNGTVHLSC
QEQNTVCTCHAGFFLRENECVSCSNCKSLECTKLCLPQIENVKGTEDSGTTVLLPLVIFFGCLLSLLFIGLMYRYQRWK
SKLYSIVCGKSTPEKEGELEGTITKPLAPNPSFSPTPGFTPTLGFSPVPSSTFTSSSTYTPGDCPNFAAPRREVAPPYQ
PILATALASDPIPNPLQKWEDSAHKPQSLDTPATLYAVVENVPPLRWKEFVRRRLGLSDHEIDRLQLNGRCLREAQYS
MLATWRRRTPRREATLELLGRVLRDMDLLGCLEDIEEALCGPAALPPAPSLR

SEQ ID NO:56 >NP_000585.2 tumor necrosis factor [Homo sapiens]

MSTESMIRDVELAEALPKKTGGPQGSRRCLFLSLFSLIVAGATTLFCLLHFGVIGPQREEFPRDLSLISPLAQAVR
SSRT PSDKPAHVANPQAEGQLQWLNRRANALLANGVELRDNLVVPSEGLYLIYSQVLFKGQGPCSTHVLLTHTIS
RIAVSYQTKVNLLSAIKSPCQRETPEGAEAKPWYEPIYLGGVFQLEKGDRLSAEINRPDYLDFAESGQVYFGI
IAL

SEQ ID NO:57 Membrane-bound tumor necrosis factor [Homo sapiens]

MSTESMIRDVELAEALPKKTGGPQGSRRCLFLSLFSLIVAGATTLFCLLHFGVIGPQREEFPRDLSLISPLAQAV
AHVVA NPQAEGQLQWLNRRANALLANGVELRDNLVVPSEGLYLIYSQVLFKGQGPCSTHVLLTHTISRIAVSYQ
TKVNLLSAIKSPCQRETPEGAEAKPWYEPIYLGGVFQLEKGDRLSAEINRPDYLDFAESGQVYFGI
IAL

SEQ ID NO: 58 Mouse IgG1 constant domain

AKTTPPSVYPLAPGSAAQTNSMVTLGCLVKGYFPEPVTVTWNSGSLSSGVHTFPAVLQSDLYTLSSSVTV
PSSTWTPSETVTCNVAHPASSTKVDDKIVPRDCGCKPCICTVPEVSSVFIFPPKPKDVLITLTPKVTCTVVD
ISKDDPEVQFSWFVDDVEVHTAQTPREEQFNSTFRSVSELPIMHQDWLNGKEFKCRVNSAAFPAPIEK
TISKTKGRPKAPQVYTIPPPKEQMAKDKVSLTCLMITDFFPEDITVEWQWNGQPAENYKNTQPIMDTDGSY
FVYSKLVQKSNWEAGNTFTCSVLHEGLHNHHTEKSLSHSPGK

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SEQ ID NO: 59 Mouse IgG2a constant domain

AKTTAPSVYPLAPVCGDTTGSSVTLGCLVKGYFPEPVTLTWNSGSLSSGVHTFPAVLQSDLYTLSSSVTV
TSSTWPSQSITCNVAHPASSTKVDKKIEPRGPTIKPCPPCKCPAPNLLGGPSVFIFPPKIKDVLMSLSPIVT
CVVVDVSEDDPDVQISWVFNVEVHTAQTQTHREDYNSTLRVVSALPIQHGDWMSGKEFKCKVNNKDL
PAPIERTISKPKGSVRAPQVYVLPPEEEMTKKQVLTTCMVTDMPEDIYVEWTNNGKTELNYKNTEPVL
DSDGSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNHHTTKSFSRTPGK

SEQ ID NO: 60 Mouse IgG1 D265A constant domain

AKTTPPSVYPLAPGSAAQTNSMVTLGCLVKGYFPEPVTVTWNSGSLSSGVHTFPAVLQSDLYTLSSSVTV
PSSTWPSSETVTCNVAHPASSTKVDKKIVPRDCGCKPCICTVPEVSSVFIFPPKPKDVLITLTPKVTCVVVA
ISKDDPEVQFSWFVDDVEVHTAQTQPREEQFNSTFRSVSELPIMHQDWLNGKEFKCRVNSAAFPAPIEK
TISKTKGRPKAPQVYTIPPPKEQMAKDKVSLTCMITDFFPEDITVEWQWNGQPAENYKNTQPIMDTDGSY
FVYSKLVQKSNWEAGNTFTCSVLHEGLHNHHTKSLSHSPGK

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FIG. 2

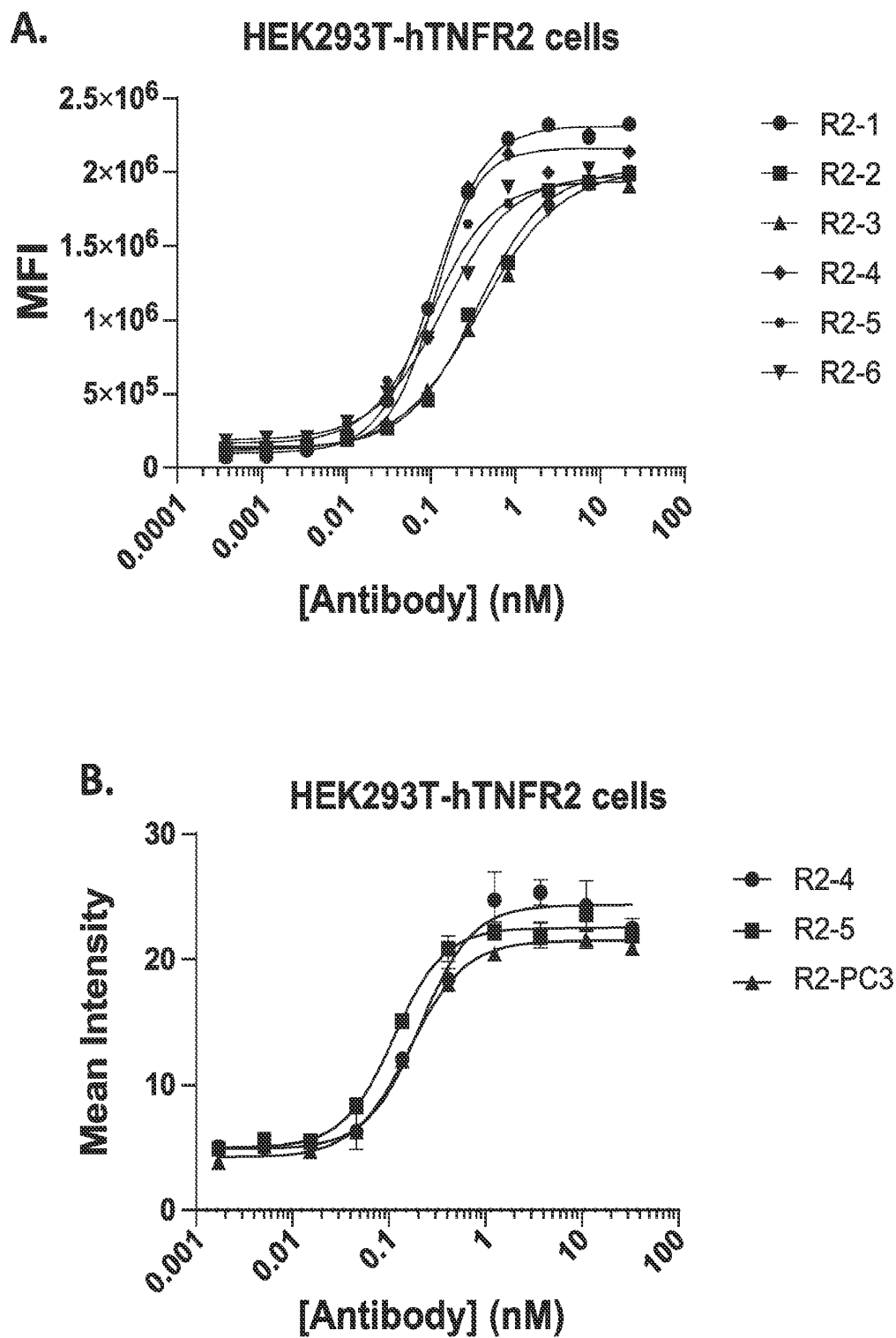
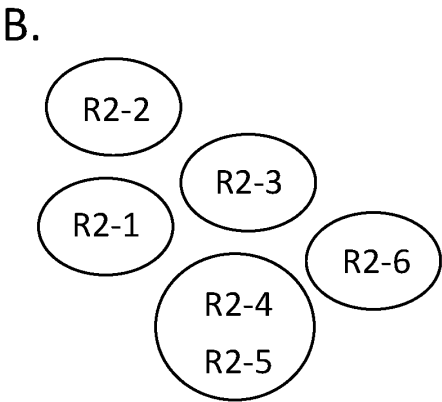
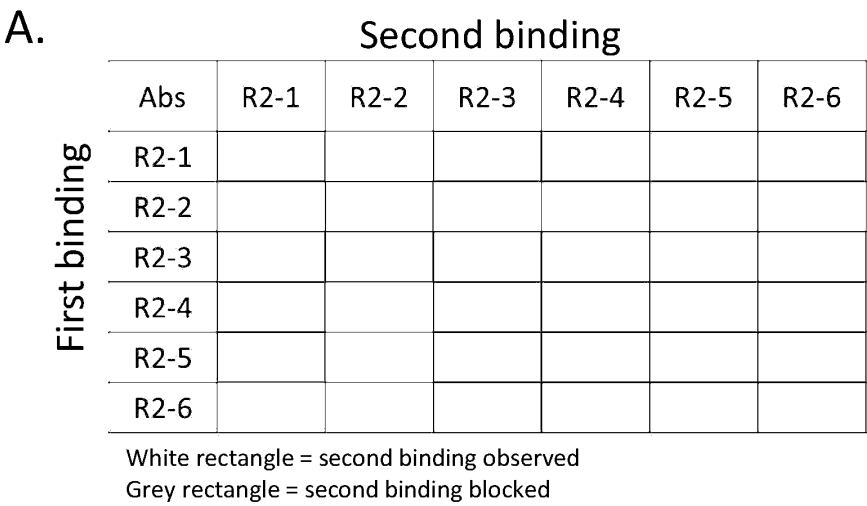
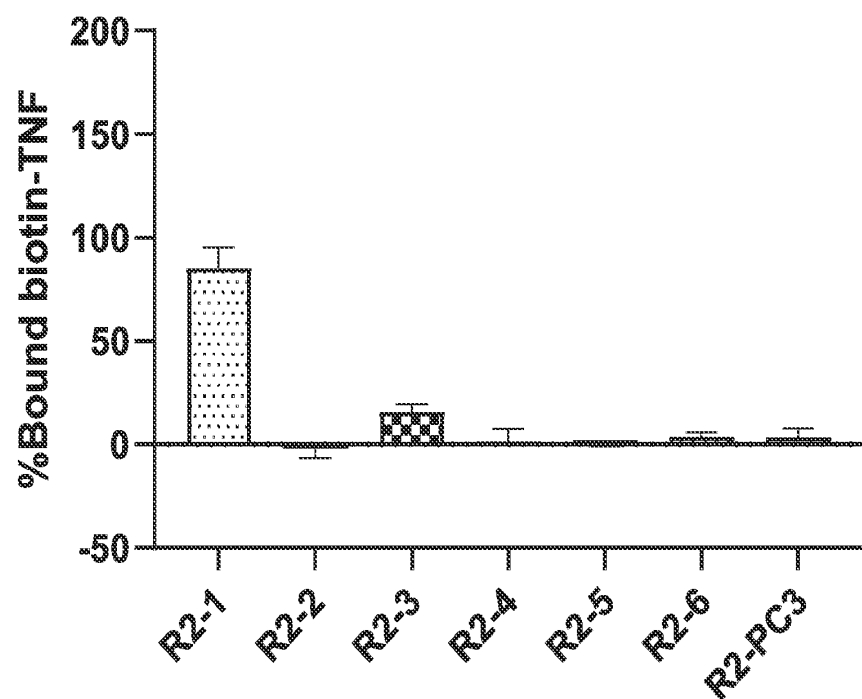


FIG. 3



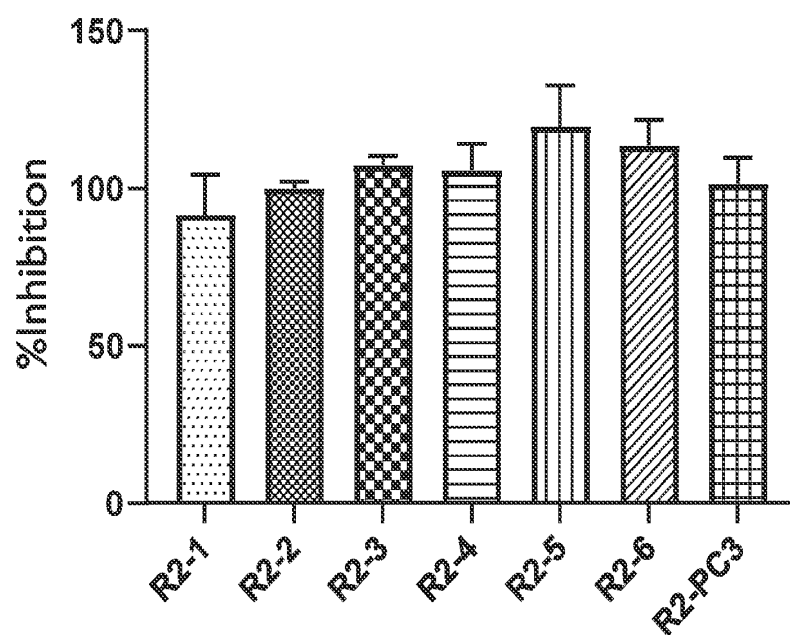
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FIG. 4

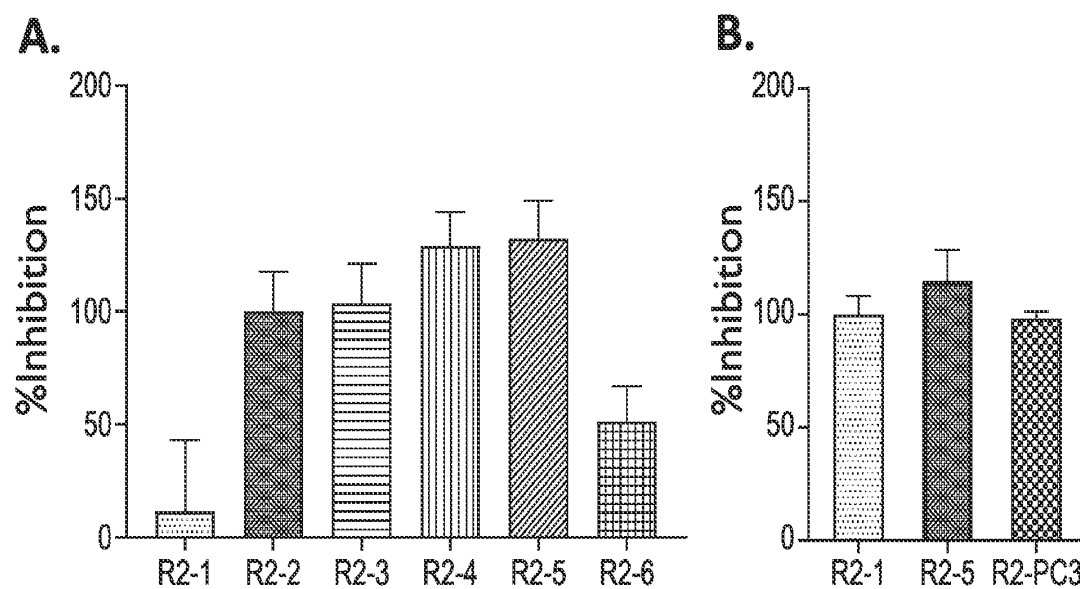


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FIG. 5

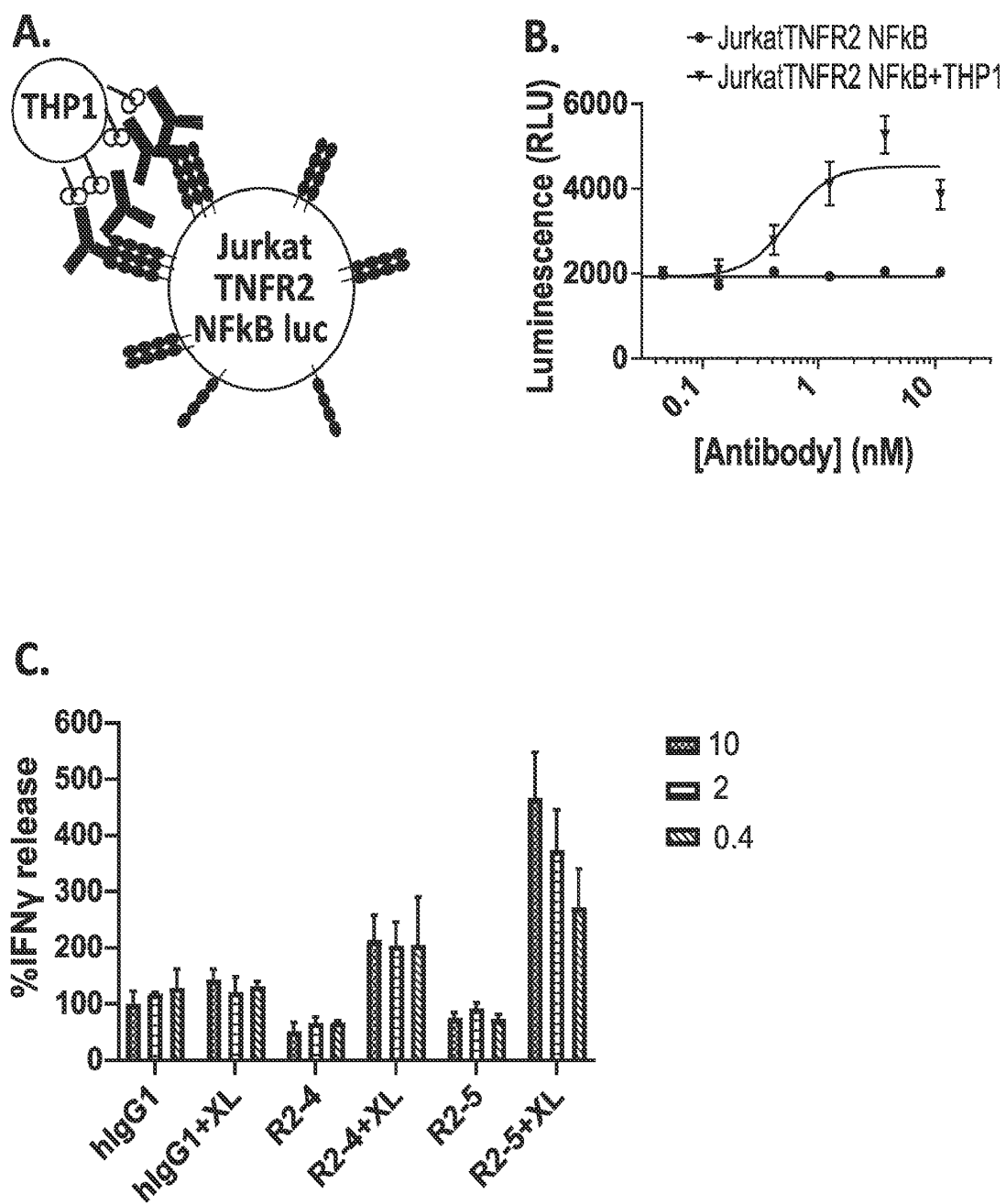


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FIG. 6

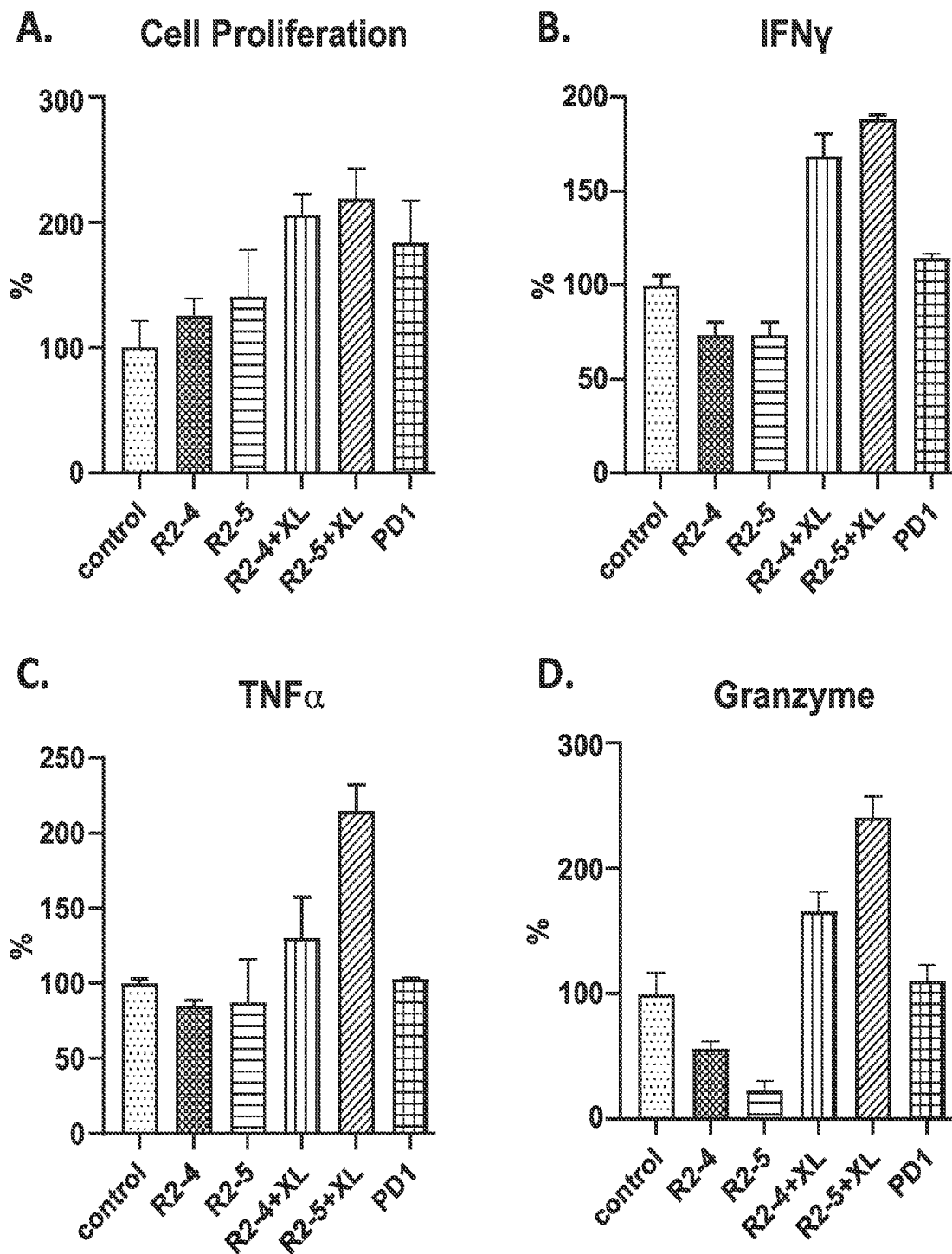
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FIG. 7



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FIG. 8



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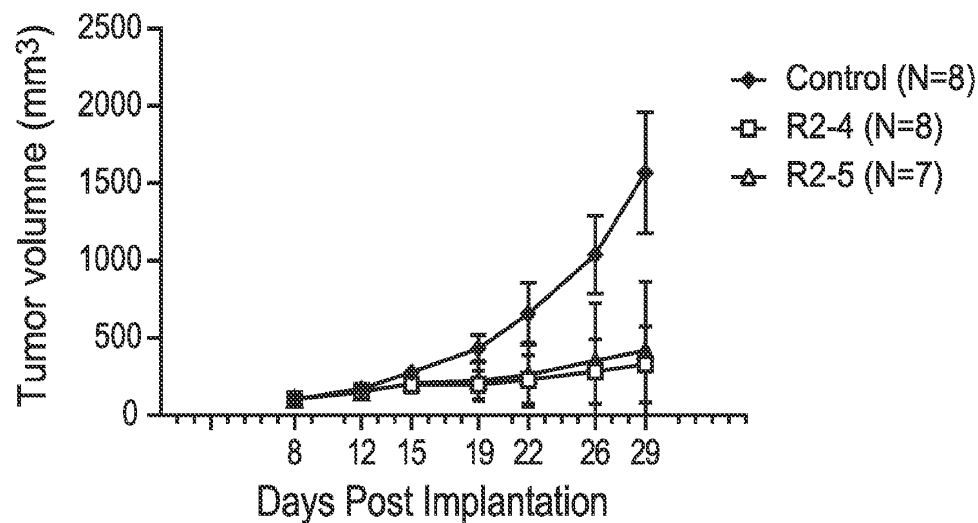
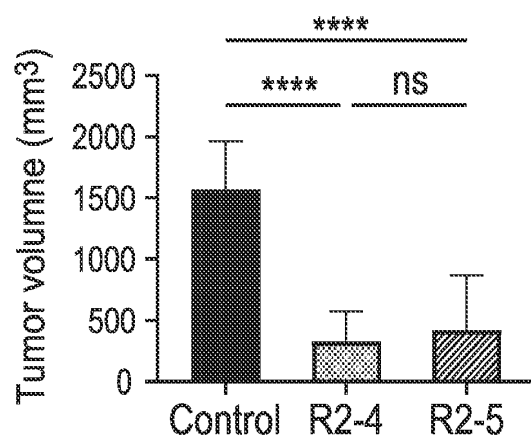
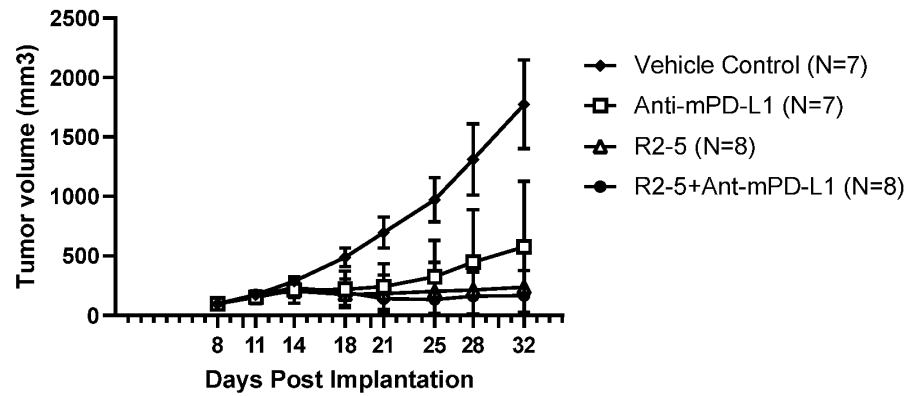
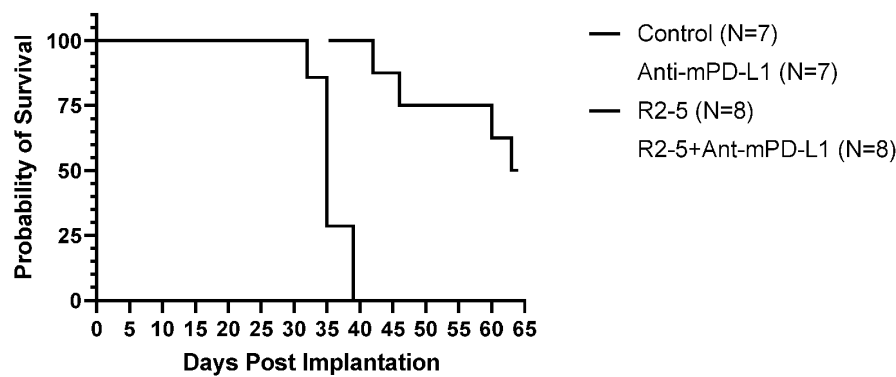
FIG. 9**A.** Murine MC38 Bearing hTNFR2 KI Mice Model**B** Day 29 Tumor Volume (One-way ANOVA)

FIG. 10

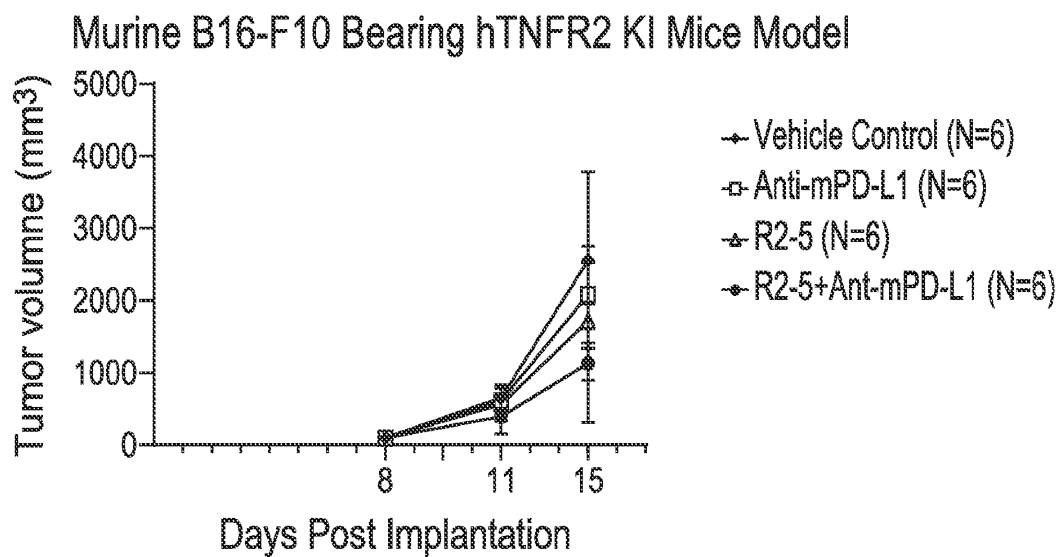
A. Murine MC38 Bearing hTNFR2 KI Mice Model



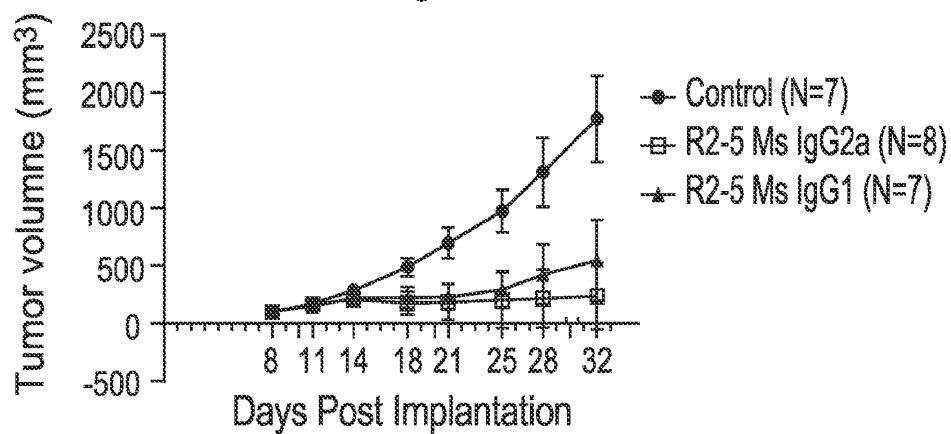
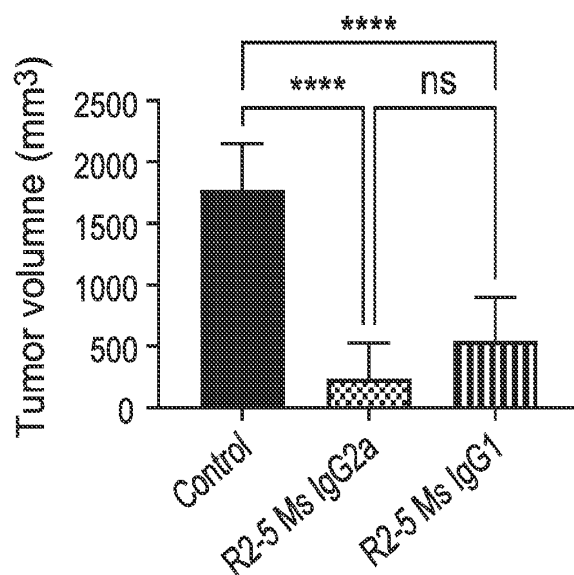
B. Murine MC38 Tumor Bearing hTNFR2 KI Mice Survival



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FIG. 11

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FIG. 12**A.** Murine MC38 Bearing hTNFR2 KI Mice Model**B.** Day 32 Tumor Volume (One-way ANOVA)

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FIG. 13