

[Figure 1]

SEQ ID No: 1 - Amino acid sequence of a heavy chain of anti-TROP2 antibody

MKHLWFFLLLVAAAPRWVLSQVQLVQSGAEVKKPGASVK
VSCKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHSGV
PKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYY
CARSGFGSSYWYFDVWGQGTLLVTVSSASTKGPSVFPLA
PSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGV
HTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHK
PSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLF
PPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDG
VEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEY
KCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE
MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP
PVLDSGGSFFLYSKLTVDKSRWQQGNVVFSCSVMHEALH
NHYTQKSLSLSPGK

Signal sequence (1-19), Variable region (20-140), Constant region (141-470)

[Figure 2]

SEQ ID NO: 2 - Amino acid sequence of a light chain of anti-TROP2 antibody

MVLQTQVFISLLLLWISGAYGDIQMTQSPSSLSASVGDR
VTITCKASQDVSTAVAWYQQKPGKAPKLLIYSASYRYT
GVPSRFSGSGSGTDFTLTISSSLQPEDFAVYYCQQHYIT
PLTFGQGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASV
VCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKD
STYSLSSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKS
FNRGEC

Signal sequence (1-20), Variable region (21-129), Constant region (130-234)

[Figure 3]

SEQ ID NO: 3 - Amino acid sequence of heavy chain CDRH1

TAGMQ

[Figure 4]

SEQ ID NO: 4 - Amino acid sequence of heavy chain CDRH2

WINTHSGVPKYAEDFKG

[Figure 5]

SEQ ID NO: 5 - Amino acid sequence of heavy chain CDRH3

SGFGSSYWYFDV

[Figure 6]

SEQ ID NO: 6 - Amino acid sequence of light chain CDRL1

KASQDVSTAVA

[Figure 7]

SEQ ID NO: 7 - Amino acid sequence of light chain CDRL2

SASYRYT

[Figure 8]

SEQ ID NO: 8 - Amino acid sequence of light chain CDRL3

QQHYITPLT

[Figure 9]

SEQ ID NO: 9 - Amino acid sequence of heavy chain variable region

QVQLVQSGAEVKKPGASVKVSCKASGYTFTTAGMQWVR
QAPGQGLEWMGWINTHSGVPKYAEDFKGRVTISADTST
STAYLQLSSLKSEDTAVYYCARSGFGSSYWYFDVWGQG
TLVTVSS

[Figure 10]

SEQ ID NO: 10 - Amino acid sequence of light chain variable region

DIQMTQSPSSLSASVGDRVTITCKASQDVSTAVAWYQQ
KPGKAPKLLIYSASYRYTGVPSTRFSGSGSGTDFTLTIS
SLQPEDFAVYYCQQHYITPLTFGQGTKLEIKRT

[Figure 11]

SEQ ID NO: 11 - Amino acid sequence of heavy chain

QVQLVQSGAEVKKPGASVKVSCKASGYTFTTAGMQWVR
QAPGQGLEWMGWINTHSGVPKYAEDFKGRVTISADTST
STAYLQLSSLKSEDTAVYYCARSGFGSSYWYFDVWGQG
TLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVV
TVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTH
TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV
VVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTY
RVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISK
AKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSD
IAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDK
SRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

[Figure 12]

SEQ ID NO: 14 - Amino acid sequence of a heavy chain of anti-HER2 antibody

EVQLVESGGGLVQPGGSLRLSCAASGFNIKDTYIHWVR
QAPGKGLEWVARIYPTNGYTRYADSVKGRFTISADTSK
NTAYLQMNSLRAEDTAVYYCSRWGGDGFYAMDYWGQGT
LVTVSSASTKGPSVFPLAPSSKSTSGGTAAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVT
VPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVV
VDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYR
VVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA
KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDI
AVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

[Figure 13]

SEQ ID NO: 15 - Amino acid sequence of a light chain of anti-HER2 antibody

DIQMTQSPSSLSASVGDRVTITCRASQDVNTAVAWYQQ
KPGKAPKLLIYSASFLYSGVPSRFSGSRSGTDFTLTIS
SLQPEDFATYYCQQHYTTPPTFGQGTKVEIKRTVAAPS
VFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDN
ALQSGNSQESVTEQDSKSTYSLSSSTLTLSKADYEKHK
VYACEVTHQGLSSPVTKSFNRGEC

[Figure 14]

SEQ ID NO: 16 - Amino acid sequence of heavy chain CDRH1
GFNIKDTY

[Figure 15]

SEQ ID NO: 17 - Amino acid sequence of heavy chain CDRH2
IYPTNGYT

[Figure 16]

SEQ ID NO: 18 - Amino acid sequence of heavy chain CDRH3

SRWGGDGFYAMDY

[Figure 17]

SEQ ID NO: 19 - Amino acid sequence of light chain CDRL1

QDVNTA

[Figure 18]

SEQ ID NO: 20 - Amino acid sequence comprising amino acid sequence of light chain CDRL2 (SAS)

SASFLYS

[Figure 19]

SEQ ID NO: 21 - Amino acid sequence of light chain CDRL3

QQHYTTPPT

[Figure 20]

SEQ ID NO: 22 - Amino acid sequence of heavy chain variable region

EVQLVESGGGLVQPGGSLRLSCAASGFNIKDTYIHWVR
QAPGKGLEWVARIYPTNGYTRYADSVKGRFTISADTSK
NTAYLQMNSLRAEDTAVYYCSRWGGDGFYAMDYWGQGT
LVTVSS

[Figure 21]

SEQ ID NO: 23 - Amino acid sequence of light chain variable region

DIQMTQSPSSLSASVGDRVTITCRASQDVNTAVAWYQQ
KPGKAPKLLIYSASFLYSGVPSRFSGSRSGTDFTLTIS
SLQPEDFATYYCQQHYTTPPTFGQGTKVEIK

[Figure 22]

SEQ ID NO: 24 - Amino acid sequence of heavy chain

EVQLVESGGGLVQPGGSLRLSCAASGFNIKDTYIHWVR
QAPGKGLEWVARIYPTNGYTRYADSVKGRFTISADTSK
NTAYLQMNSLRAEDTAVYYCSRWGGDGFYAMDYWGQGT
LVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVT
VPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVV
VDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYR
VVSVELTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA
KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDI
AVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

[Figure 23]

SEQ ID NO: 25 - Amino acid sequence of L0115 anti-PD1 heavy
chain CDRH1

DYGMH

[Figure 24]

SEQ ID NO: 26 - Amino acid sequence of L0115 anti-PD1 heavy
chain CDRH2

YISSGSYTIYSADSVKG

[Figure 25]

SEQ ID NO: 27 - Amino acid sequence of L0115 anti-PD1 heavy
chain CDRH3

RAPNSFYEYYFDY

[Figure 26]

SEQ ID NO: 28 - Amino acid sequence of L0115 anti-PD1 light chain CDRL1

SASSKHTNLYWSRHY

[Figure 27]

SEQ ID NO: 29 - Amino acid sequence of L0115 anti-PD1 light chain CDRL2

LTSNRAT

[Figure 28]

SEQ ID NO: 30 - Amino acid sequence of L0115 anti-PD1 light chain CDRL3

QQWSSNPFT

[Figure 29]

SEQ ID NO: 31 - Amino acid sequence of L0115 anti-PD1 heavy chain variable region

EVQLVESGGGLVQPGGSLRLSCAASGFTFSDYGMHWVRQAPGKGLEWVAYISSGSYTIYSAD
SVKGRFTISRDNAKNSLYLQMNSLRAEDTAVYYCARRAPNSFYEYYFDYWGGTTVTVSS

[Figure 30]

SEQ ID NO: 32 - Amino acid sequence of L0115 anti-PD1 heavy chain

EVQLVESGGGLVQPGGSLRLSCAASGFTFSDYGMHWVRQAPGKGLEWVAYISSGSYTIYSAD
SVKGRFTISRDNAKNSLYLQMNSLRAEDTAVYYCARRAPNSFYEYYFDYWGGTTVTVSSAS
TKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYS
LSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPEFEGGPSVFLE
PPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPASIIEKTISKAKGQPREPQVCTLPSSREEMTKNQVSLSC

AVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSGSSFFLVSKLTVDKSRWQQGNVFSCSV MH
EALHNHYTQKSLSLSPGK

[Figure 31]

SEQ ID NO: 33 - Amino acid sequence of L0115 anti-PD1 light
chain variable region

QIVLTQSPATLSLSPGERATLSCSASSKHTNLYWSRMYWYQQKPGQAPRLLIYLT SNRATG
IPARFSGSGSGTDFTLTISSELPEDFAVYYCQQWSSNPFTFGQGTKLEIK

[Figure 32]

SEQ ID NO: 34 - Amino acid sequence of L0115 anti-PD1 light
chain

QIVLTQSPATLSLSPGERATLSCSASSKHTNLYWSRMYWYQQKPGQAPRLLIYLT SNRATG
IPARFSGSGSGTDFTLTISSELPEDFAVYYCQQWSSNPFTFGQGTKLEIKRTVAAPSVFIFP
PSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKSTYLSSTLT L
SKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

[Figure 33]

SEQ ID NO: 35 - Amino acid sequence of VAR1 anti-TIGIT heavy
chain CDRH1
SYAMH

[Figure 34]

SEQ ID NO: 36 - Amino acid sequence of VAR1 anti-TIGIT heavy
chain CDRH2
VISYAGEVKYYADSVKG

[Figure 35]

SEQ ID NO: 37 - Amino acid sequence of VAR1 anti-TIGIT heavy chain CDRH3

DPLPLHYYGMDV

[Figure 36]

SEQ ID NO: 38 - Amino acid sequence of VAR1 anti-TIGIT light chain CDRL1

SGSSSNIGRRPVN

[Figure 37]

SEQ ID NO: 39 - Amino acid sequence of VAR1 anti-TIGIT light chain CDRL2

SQNQRPS

[Figure 38]

SEQ ID NO: 40 - Amino acid sequence of VAR1 anti-TIGIT light chain CDRL3

AVWDDIGRVLQ

[Figure 39]

SEQ ID NO: 41 - Amino acid sequence of VAR1 anti-TIGIT heavy chain variable region

QVQLVESGGGVVQPGRSLRLSCAASGFTFSSYAMHWVRQAPGKGLEWVAVISYAGEVKYYAD
SVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDPLPLHYYGMDVWGQGTITVTVSS

[Figure 40]

SEQ ID NO: 42 - Amino acid sequence of VAR1 anti-TIGIT heavy chain

QVQLVESGGGVVQPGRSLRLSCAASGFTFSSYAMHWVRQAPGKGLEWVAVISYAGEVKYYAD
SVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCARDPLPLHYYGMDVWGQGTTVTVSSAST
KGPSVCPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSL
SSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSVDKTHTCPPCPAPEFEGGPSVFLFP
PKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPASIEKTISKAKGQPREPQVYTLPPCREEMTKNQVSLWCL
VKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSSVMHE
ALHNHYTQKSLSLSPGK

[Figure 41]

SEQ ID NO: 43 - Amino acid sequence of VAR1 anti-TIGIT light
chain variable region

QSVLTQPPSASGTPGQRVTISCSGSSSNIGRRPVNWWYQQLPGTAPKLLIYSQNQRPSGVPDR
FSGSQSGTSASLAISGLQSEDEADYFCVWDDIGRVLQLGGGTQLTVL

[Figure 42]

SEQ ID NO: 44 - Amino acid sequence of VAR1 anti-TIGIT light
chain

QSVLTQPPSASGTPGQRVTISCSGSSSNIGRRPVNWWYQQLPGTAPKLLIYSQNQRPSGVPDR
FSGSQSGTSASLAISGLQSEDEADYFCVWDDIGRVLQLGGGTQLTVLGQPKAAPSVTLFPP
CSEELQANKATLVCLISDFYPGAVTVAWKADSSPVKAGVETTTTPSKQSNNKYAASSYLSLTP
EQWKSHRSYSCQVTHEGSTVEKTVAPTEVS

[Figure 43]

SEQ ID NO: 45 - Amino acid sequence of MEDI5752 anti-PD1 light
chain

QIVLTQSPATLSLSPGERATLSCSASSKHTNLYWSRHYWYQQKPGQAPRLLIYLTSNRATG
IPARFSGSGSGTDFTLTISSELPEDFAVYYCQQWSSNPFTFGQGTKLEIKRTVAAPSVFIFP

PSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTTL
SKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

[Figure 44]

SEQ ID NO: 46 - Amino acid sequence of MEDI5752 anti-PD1 heavy chain

EVQLVESGGGLVQPGGSLRLSCAASGFTFSDYGMHWVRQAPGKGLEWVAYISSGSYTIYSAD
SVKGRFTISRDNKNSLYLQMNSLRAEDTAVYYCARRAPNSFYEYYFDYWGQGTITVTVSSAS
TKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYS
LSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPEFEGGPSVFLE
PPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPASIIEKTISKAKGQPREPQVCTLPSSREEMTKNQVSLSC
AVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLVSKLTVDKSRWQQGNVFSFSVMH
EALHNHYTQKSLSLSPGK

[Figure 45]

SEQ ID NO: 47 - Amino acid sequence of MEDI5752 anti-CTLA-4 light chain

DIQMTQSPSSLSASVGDRVTITCRASQSINSYLDWYQQKPGKAPKLLIYAASSLQSGVPSRF
SGSGSGTDFTLTITSLQPEDFATYYCQQYYSTPFTFGPGTKVEIKGQPKAAPSVTLFPPCSE
ELQANKATLVCLISDFYPGAVTVAWKADSSPVKAGVETTTTPSKQSNNKYAASSYLSLTPEQW
KSHRSYSCQVTHEGSTVEKTVAPTEVS

[Figure 46]

SEQ ID NO: 48 - Amino acid sequence of MEDI5752 anti-CTLA-4 heavy chain

QVQLVESGGGVVQPGRSLRLSCAASGFTFSSYGMHWVRQAPGKGLEWVAWIYDGSNKYYAD
SVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCARDPRGATLYYYYYGMDVWGQGTITVTVS
SASTKGPSVCPAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSG

LYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSVDKTHTCPPCPAPEFEGGPSV
FLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRV
VSVLTVLHQDWLNGKEYKCKVSNKALPASIIEKTISKAKGQPREPQVYTLPPCREEMTKNQVS
LWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFS
VMHEALHNHYTQKSLSLSPGK

[Figure 47]

SEQ ID NO: 49 - Amino acid sequence of MEDI5752 anti-PD1 light
chain CDRL1

SASSKHTNLYWSRHYWY

[Figure 48]

SEQ ID NO: 50 - Amino acid sequence of MEDI5752 anti-PD1 light
chain CDRL2

TSNRAT

[Figure 49]

SEQ ID NO: 51 - Amino acid sequence of MEDI5752 anti-PD1 light
chain CDRL3

QQWSSNP

[Figure 50]

SEQ ID NO: 52 - Amino acid sequence of MEDI5752 anti-PD1 heavy
chain CDRH1

GFTFSDYGMH

[Figure 51]

SEQ ID NO: 53 - Amino acid sequence of MEDI5752 anti-PD1 heavy
chain CDRH2

YISSGSYTIYSADSVKG

[Figure 52]

SEQ ID NO: 54 - Amino acid sequence of MEDI5752 anti-PD1 heavy chain CDRH3

RAPNSFYEYYFDY

[Figure 53]

SEQ ID NO: 55 - Amino acid sequence of MEDI5752 anti-CTLA-4 light chain CDRL1

RASQSINSYLD

[Figure 54]

SEQ ID NO: 56 - Amino acid sequence of MEDI5752 anti-CTLA-4 light chain CDRL2

AASSLQS

[Figure 55]

SEQ ID NO: 57 - Amino acid sequence of MEDI5752 anti-CTLA-4 light chain CDRL3

QQYYSTP

[Figure 56]

SEQ ID NO: 58 - Amino acid sequence of MEDI5752 anti-CTLA-4 heavy chain CDRH1

GFTFSSYGMH

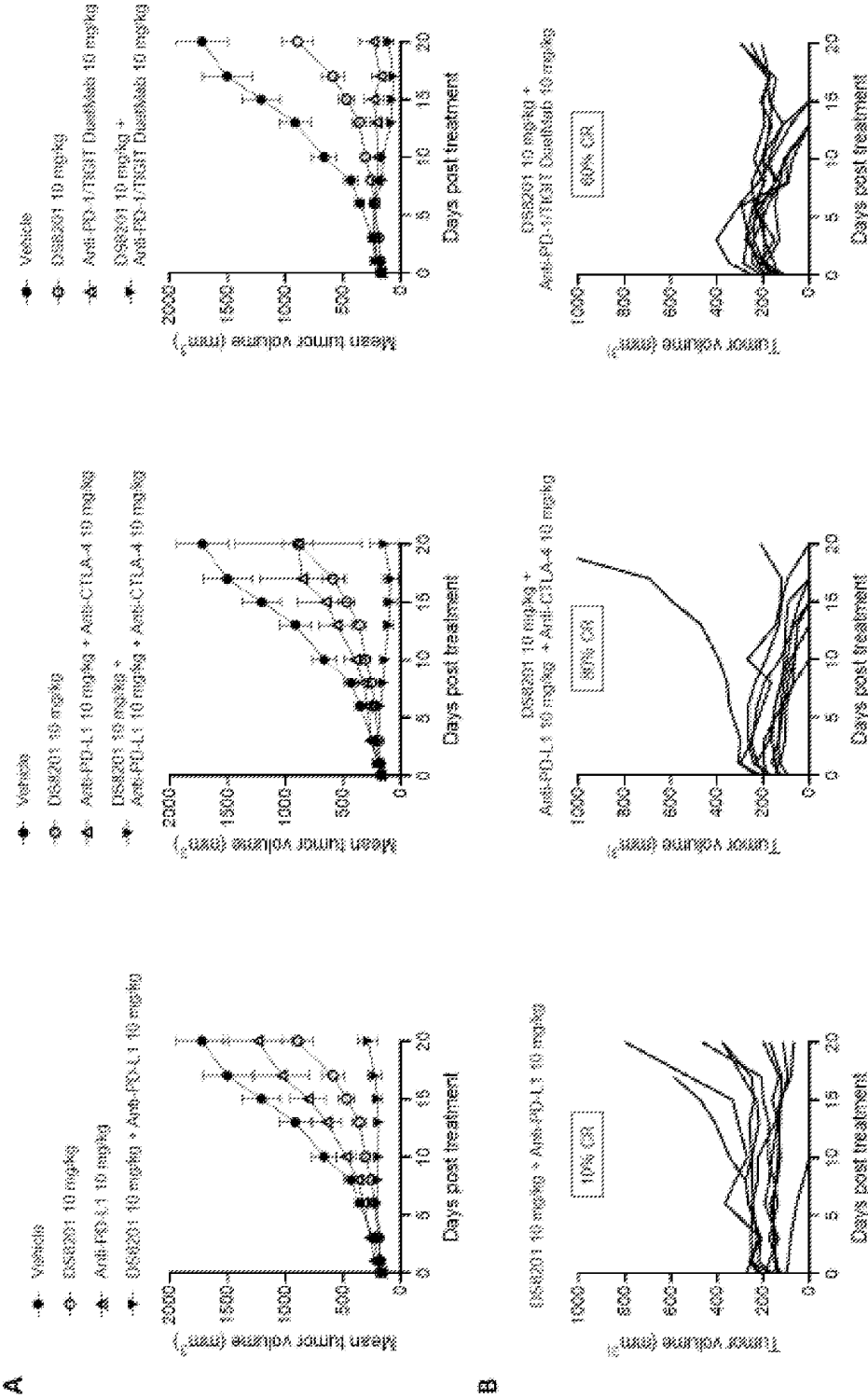
[Figure 57]

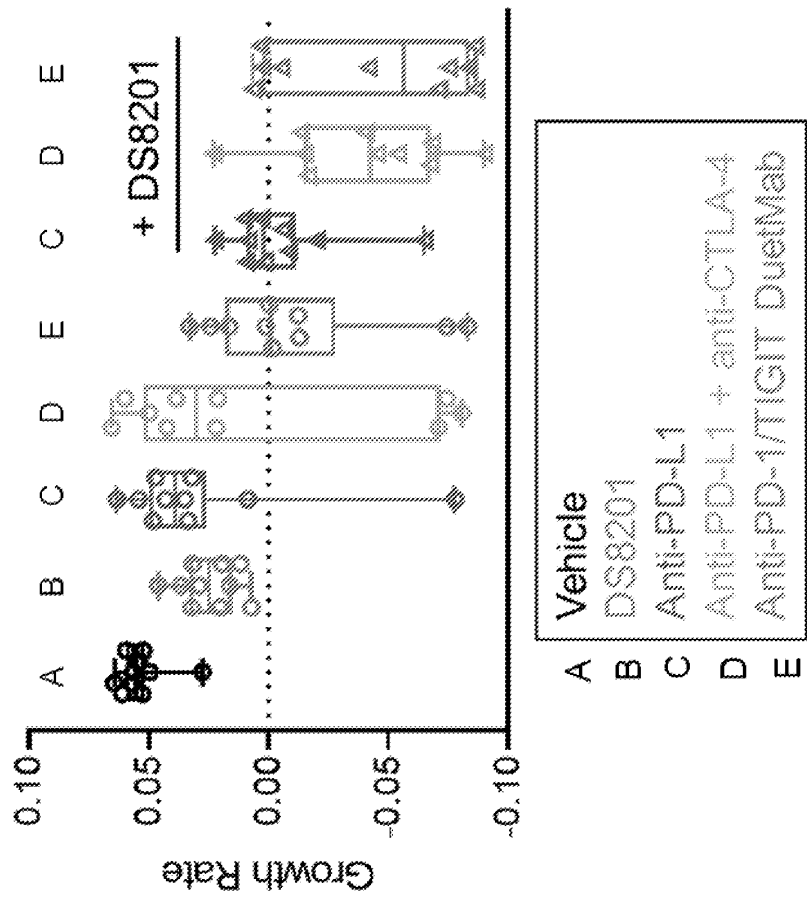
SEQ ID NO: 59 - Amino acid sequence of MEDI5752 anti-CTLA-4
heavy chain CDRH2
VIWYDGSNKYYADSVKG

[Figure 58]

SEQ ID NO: 60 - Amino acid sequence of MEDI5752 anti-CTLA-4
heavy chain CDRH3
DPRGATLYYYYYGMDV

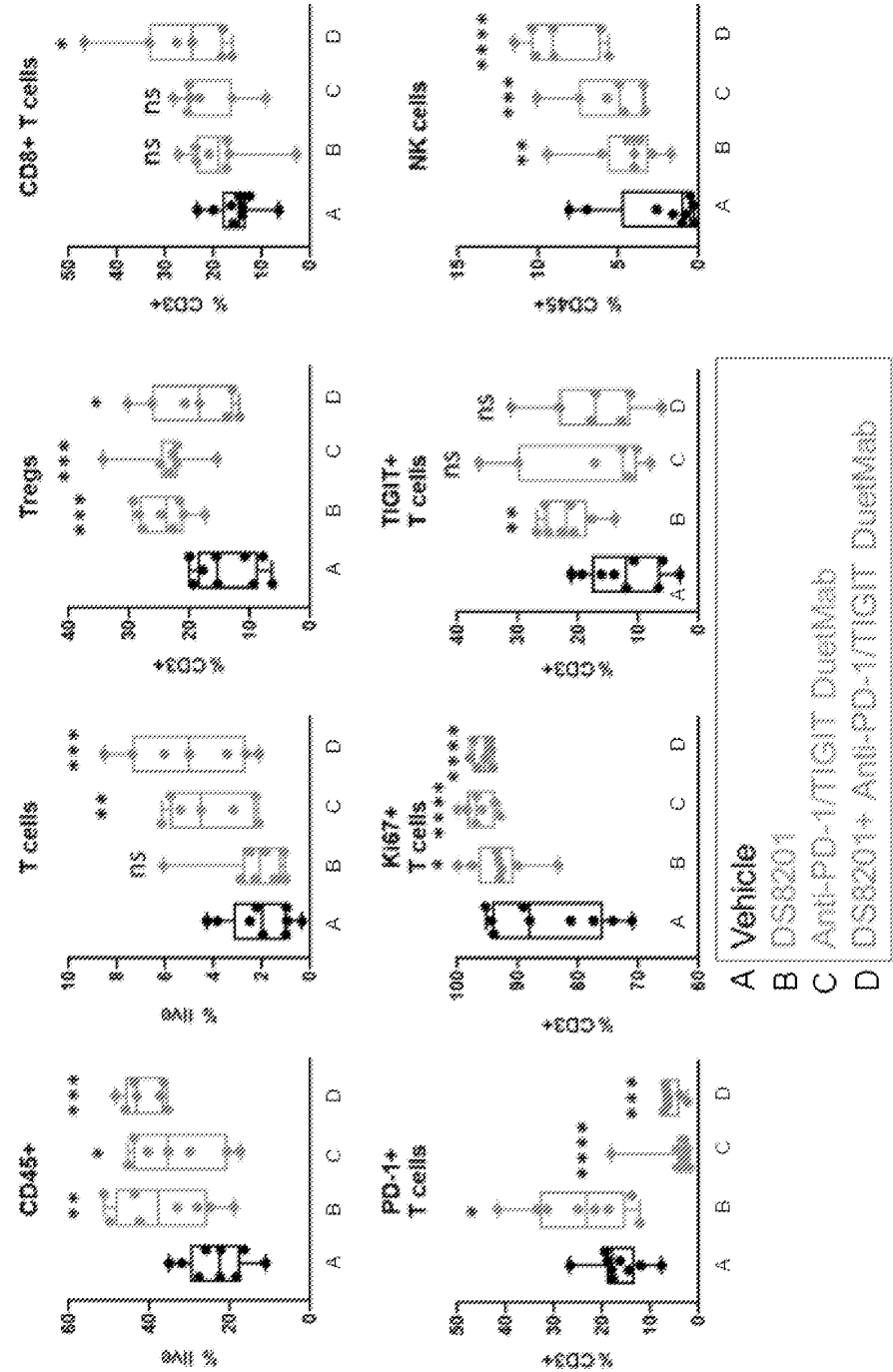
[Figure 59]

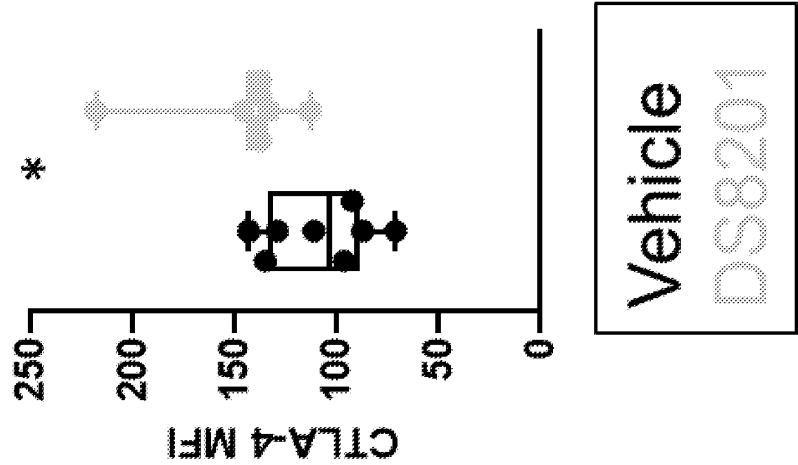




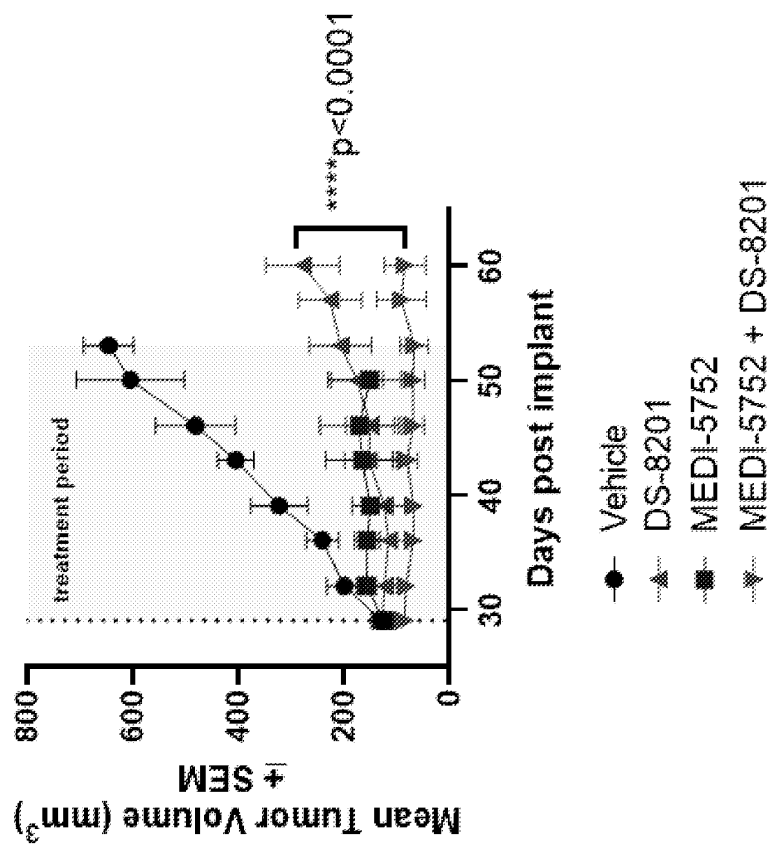
[Figure 60]

[Figure 61]

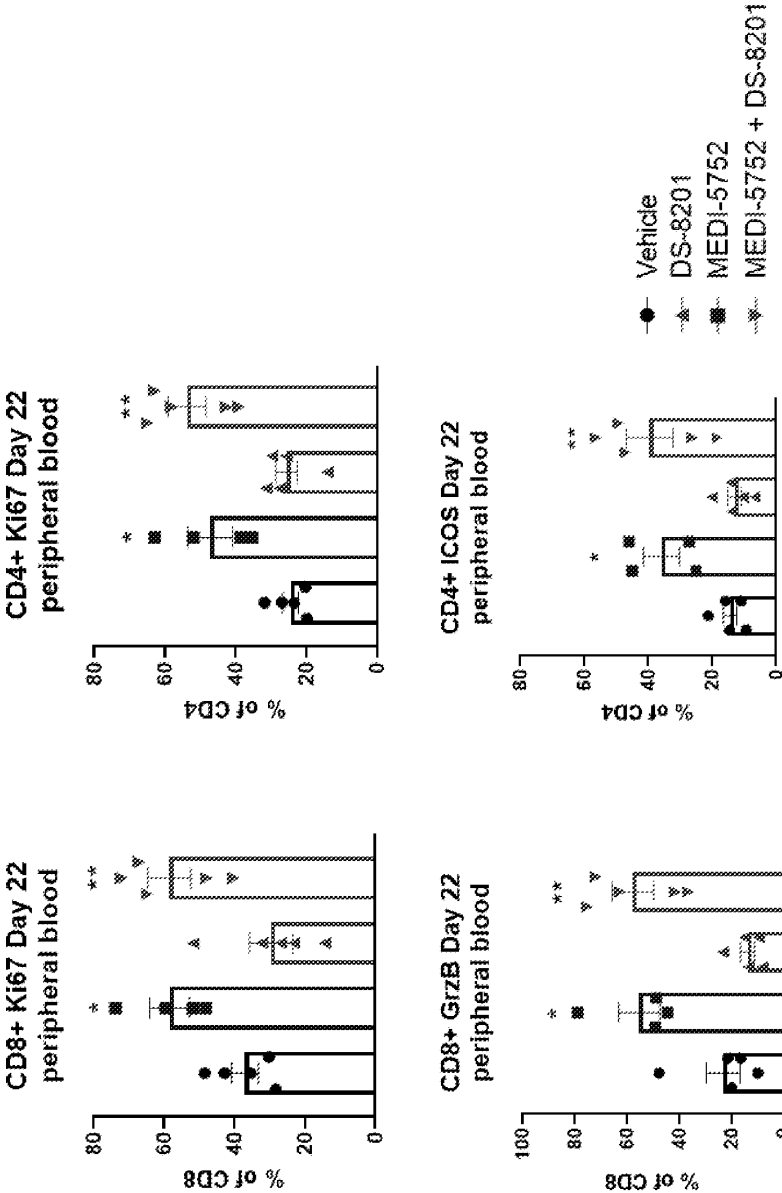




[Figure 62]



[Figure 63]



[Figure 64]