

Supporting information

Anti-PD-L1 Based Bispecific Antibodies Targeting Co-Inhibitory and Co-Stimulatory Molecules For Cancer Immunotherapy

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Table S1 Detailed sequence information of each anti-PD-L1 based bsAbs.

BsAb	Targets	Sequence
BCP-84	CTLA-4×PD-L1	<p>Heavy chain fusion polypeptide</p> <p>EVQLVESGGGLVQPGGSLRLSCAASGYTYSRHCLGWFRQAPGKGREAVSTIDSDGSTSYADSVKGRF TISRDNAKNTLYLQMNSLRPEDTAVYYCAIGPNPRYCSGAPNTRGAEHYFGYWGQGLTVTVSSEPKS SDKTHTSPSPPEVQLVESGGGLVQPGGSLRLSCAASGFTFSDSWIHWVRQAPGKGLEWVAWISPYGG STYYADSVKGRFTISADTSKNTAYLQMNSLRAEDTAVYYCARRHWPGGFDYWGQGLTVTVSSAST KGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTV PSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT EVTCTVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYASTYRVVSVLTVLHQDWLNGKEYKC KVSNAKALPAIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSPG</p> <p>Light chain</p> <p>DIQMTQSPSSLSASVGDRVTITCRASQDVSTAVAWYQQKPGKAPKLLIYSASFLYSGVPSRFSGSGS TDFTLTISLQPEDFATYYCQQYLHPATFGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVCLLN NFYPREAKVQWKVDNALQSGNSQESVTEQDSKSTYLSSTLTLSKADYEKHKVYACEVTHQGLSS PVTKSFNRGEC</p>
BCP-85	CTLA-4×PD-L1	<p>Heavy chain fusion polypeptide</p> <p>EVQLVESGGGLVQPGGSLRLSCAASGDSVSNYMGWFRQAPGKGREEVSSIYPTGGTFYTDVSKGRF TISRDNAKNTLYLQMNSLRPEDTAVYYCAAGKWGTDYWGQGLTVTVSSEPKSSDKTHTSPSPPEVQ LVESGGGLVQPGGSLRLSCAASGFTFSDSWIHWVRQAPGKGLEWVAWISPYGGSTYYADSVKGRFTI SADTSKNTAYLQMNSLRAEDTAVYYCARRHWPGGFDYWGQGLTVTVSSASTKGPSVFPLAPSSKST SGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPPSSSLGTQTYICNVN HKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDP EVKFNWYVDGVEVHNAKTKPREEQYASTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAIEKTIS KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSF FLYSKLTVDKSRWQQGNVFSCVMHEALHNHYTQKSLSLSP</p> <p>Light chain</p> <p>DIQMTQSPSSLSASVGDRVTITCRASQDVSTAVAWYQQKPGKAPKLLIYSASFLYSGVPSRFSGSGS TDFTLTISLQPEDFATYYCQQYLHPATFGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVCLLN NFYPREAKVQWKVDNALQSGNSQESVTEQDSKSTYLSSTLTLSKADYEKHKVYACEVTHQGLSS PVTKSFNRGEC</p>
AB-04	CTLA-4×PD-L1	<p>Anti-PD-L1 Variable heavy chain</p> <p>QVQLQESGPGLVKPSETLSITCTVSGFSLSNYDISWIRQPPGKGLEWLGVITWGATNYPALKSRLTI SRDNSKNQVSLKMSSVTAADTAVYYCVRDSNRYDEPFTYWGQGLTVTVSS</p>

		<p>Anti-PD-L1 Variable light chain</p> <p>EIVLTQSPDTLSVTPKEKVTLCRASQSIGTNIHWFQQKPGQSPKLLIKYASESISGVPSRFSGSGSGTD</p> <p>FTLTINSVEAEDAATYYCQQSNSWPYTFGQCTKLEIK</p> <p>Anti-CTLA-4 Variable heavy chain</p> <p>QVQLVESGGGVVQPGRSLRLSCAASGFTFSSYTMHWVRQAPGKCLEWVTFISYDGNKYYADSVK</p> <p>GRFTISRDN SKNTLYLQMNSLRAEDTAIYYCARTGWLGPFDYWGQGT LTVSS</p> <p>Anti-CTLA-4 Variable light chain</p> <p>EIVLTQSPGTLSLSPGERATLSCRASQSVGSSYLAWYQQKPGQAPRLLIYGAFSRATGIPDRFSGSGSG</p> <p>TDFTLTISRLEPEDFAVYYCQQYGSSPWTFGCGTKVEIK</p>
KN-046	CTLA-4×PD-L1	<p>QVQLVESGGGLVQPGGSLRLSCAASGKMSSRRRCMAWFRQAPGKERERVAKLLTSGSTYLADSVK</p> <p>GRFTISRDN SKNTVY LQMNSLRAEDTAVYYCAADSFEDPTCTLVTS SGAFQYWGQGT LTVSSGAP</p> <p>QVQLVESGGGLVQPGGSLRLSCAASGYIYSAYCMGWFRQAPGKGLEGVAAIYIGGGSTYYADSVKG</p> <p>RFTISRDN SKNTLY LQMNSLRAEDTAVYYCAADV IPTETCLGGSWSGPF GYWGQGT LTVSSGSEPK</p> <p>SSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH</p> <p>NAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTL</p> <p>PSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQ</p> <p>GNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
PR-001573	CTLA-4×PD-L1	<p>Polypeptide chain 1</p> <p>DIQMTQSPSTLSASVGDRVTVTCRASQSIYIWLAWYQQKPGKAPNLLIYKASSLETGVPSRFSGSGSG</p> <p>TEFTLTISSLQPD FATYYCQQYYGSSRTFGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVCLLN</p> <p>NFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTLSKADYEKHKVYACEVTHQGLSS</p> <p>PVTKSFNRGEC</p> <p>Polypeptide chain 2</p> <p>EVQLVESGGGLIQPGGSLRLSCAVSGFTVSKNYMSWVRQAPGKGLEWVSVVYSGGSKTYADSVKG</p> <p>RFTISRDN SKNTLY LQMNSLRAEDTAVYYCARAVHPSPSSFDIWGQGTMTVTVSSKLEPKSSDKTHTP</p> <p>PPPPRTEVQLVESGGGLVQPGGSLRLSCAASGFTFSSYWMSWVRQAPGKGLEWVANIKQEGSEKYY</p> <p>VDSVKGRFTISRDN AKNSLY LQMNSLRAEDTAVYYCARDRAVAGAFDIWGQGTMTVTVSSASTKGPS</p> <p>VFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPS</p> <p>SS LGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTC</p> <p>VVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSN</p> <p>KALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT</p> <p>TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p>
FS118	LAG-3×PD-L1	<p>Heavy chain</p> <p>EVQLVESGGGLVQPGRSLRLSCAASGFTFDDYAMHWVRQTPGKGLEWVSGISWKSNIIGYADSVKG</p> <p>RFTISRDN AKNSLY LQMNSLRAEDTALYYCARDITGSGSYGWFDPWGQGT LTVSSASTKGPSVFPL</p> <p>APSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSWTVPSSSLGT</p> <p>QTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVV</p> <p>VDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKA</p> <p>LPAPIEKTISKAKGQPREPQVYTLPPSWDEPWGEDVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP</p> <p>PVLDSDGSFFLYSKLTVPYDRVWWPDEFSCSVMHEALHNHYTQKSLSLSPG</p> <p>Light chain</p> <p>DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKPLIYVASSLQSGVPSSFSFGSGSGT</p> <p>DFTLTISSLQPEDFATYYCQQSYSNPITFGQGT RLEIKRTVAAPSVFIFPPSDEQLKSGTASVCLLN</p> <p>NFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTLSKADYEKHKVYACEVTHQGLSSPV</p>

		<p>TKSFNRGEC</p> <p>CDR1 variable heavy chain</p> <p>GFTFDDYA</p> <p>CDR2 variable heavy chain</p> <p>ISWKSNI</p> <p>CDR3 variable heavy chain</p> <p>ARDITGSGSYGWFD</p> <p>CDR1 variable light chain</p> <p>QSISSY</p> <p>CDR2 variable light chain</p> <p>VAS</p> <p>CDR3 variable light chain</p> <p>QQSYSNPIT</p>
ABL-501	LAG-3×PD-L1	NA
IBI323	LAG-3×PD-L1	NA
mPDL1HCv1- E-sLAG3	LAG-3×PD-L1	<p>E-linker</p> <p>EPKSSDKTHTSPPSP</p> <p>Heavy chain-linker-sLAG3</p> <p>EVQLVQSGAEVKKPGASVKVSCKASGYIFTGYGITWVRQAPGQGLEWMGEIFPRRVQTYTSEKFKG</p> <p>RVTMTTDTSTSTAYMELRSLRSDDTAVYYCARDYDPYFALDYWGQGTITVTVSSASTKGPSVFPLAP</p> <p>SSKSTSGGTAALGCLVKDYFPEPTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTY</p> <p>ICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV</p> <p>SHEDPEVKFNWYVDGVEVHNAKTKPREEQYASTYRVSVLTVLHQDWLNGKEYKCKVSNKALPAP</p> <p>IEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLD</p> <p>SDGSFFLYSKLTVDKSRWQQGVFSCSVMHEALHNHYTQKSLSLSPGKEPKSSDKTHTSPPSPEVQLV</p> <p>ESGGGLVQPGGSLRLSCAASGYTVSSYCMGWFRQAPGKGREGVSAIDSDGSVSYADSVKGRFTISKD</p> <p>NSKNTLYLQMNSLRAEDTAVYFCAADLCWVDQDQGEYNTWGQGTITVTVSS</p> <p>Light chain</p> <p>DIQMTQSPSSLSASVGDRVTITCRASQDVSTAVDWYQQKPGKAPKLLIYSASYRYTGVPDRFSGSGS</p> <p>GTDFTFITISLQPEDATYYCQQHYSIPFTFGQGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCCLN</p> <p>NFYPREAKVQWKVDNALQSGNSQESVTEQDSKSTYLSLSTLTLSKADYEKHKVYACEVTHQGLSS</p> <p>PVTKSFNRGEC</p> <p>CDR1 variable heavy chain</p> <p>GYIFTGYGIT</p> <p>CDR2 variable heavy chain</p> <p>EIFPRRVQTYTSEKFKG</p> <p>CDR3 variable heavy chain</p> <p>DYDPYFALDY</p> <p>CDR1 variable light chain</p> <p>RASQDVSTAVD</p> <p>CDR2 variable light chain</p> <p>SASYRYT</p> <p>CDR3 variable light chain</p> <p>QQHYSIPFT</p>

		<p>Heavy chain</p> <p>EVQLVQSGAEVKKPGASVKVSCASGYIFTGYGITWVRQAPGQGLEWMGEIFPRRVQTYSEKFKG RVTMTTDTSTSTAYMELRSLRSDDTAVYYCARDYDPYFALDYWGQGTITVTVSSASTKGPSVFPLAP SSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTY ICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPREEQYASTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP IEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLD SDGSFFLYSKLTVDKSRWQQGVFSCSVMEALHNHYTQKSLSLSPGK</p> <p>LAG3 single domain antibody (sdAb)</p> <p>EVQLVESGGGLVQPGGSLRLSCAASGYTVSSYCMGWFRQAPGKGREGVSAIDSDGSVSYADSVKGR FTISKDNSKNTLYLQMNSLRAEDTAVYFCAADLCWVDQDQGEYNTWGQGTITVTVSS</p> <p>sLAG3 CDR1 variable heavy chain</p> <p>GYTVSSYCMG</p> <p>sLAG3 CDR2 variable heavy chain</p> <p>AIDSDGSVSYADSVKG</p> <p>sLAG3 CDR3 variable heavy chain</p> <p>DLCWVDQDQGEYNT</p>
W-3669	LAG-3×PD-L1	<p>Anti-PDL1 VHH</p> <p>EVQLVESGGGLVQPGGSLRLSCAASGHFSNLAVNWFRQAPGKERELVAGILWSGGSTFYADSVKGR FTISRGNAENMLYLQMNSLRAEDTAVYYCNTGTNWGQGTITVTVSS</p> <p>CDR1 Anti-PDL1 VHH</p> <p>GHFSNLAVN</p> <p>CDR2 Anti-PDL1 VHH</p> <p>GILWSGGSTFYADSVKG</p> <p>CDR3 Anti-PDL1 VHH</p> <p>GTN</p> <p>Anti-LAG3 VHH</p> <p>QVQLVESGGGVVQPGGSLRLSCAASGLTSLQYTMGWFRQAPGKERELVAIIHWTSSVTDYADSVY GRFTISRDDSKNTGYLQMNSLRAEDTAVYYCAATHYYTHRGPFDYWGQGTITVTVSS</p> <p>CDR1 Anti-LAG3 VHH</p> <p>GLTSLQYTMG</p> <p>CDR2 Anti-LAG3 VHH</p> <p>AIHWTSSVTDYADSVY</p> <p>CDR3 Anti-LAG3 VHH</p> <p>THYYTHRGPF</p>
hz7F10-hzB6	LAG-3×PD-L1	<p>Heavy chain</p> <p>EVQLVQSGAEVKKPGASVKVSCASGVNIKDDYMHWVRQAPGQGLEWIGRIDPEDVETKYDPKFQ GRVTITADTSTSTAYMELSSLRSEDTAVYYCARSFYSNYVNYFDQWGQGTITVTVSSASTKGPSVFPL APSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQ TYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVV DVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPV LDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGGGGSPGGGSPGGGSEV QLVESGGGLVQPGGSLRLSCAASEYIGDRYCAGWFRQAPGKEREGVAMIDRHGIVRYKDSVEGRFTI</p>

		<p>SRNHAGNTLYLQMNSLRAEDTAVYYCAADRPTNVIPCRPEYPMMDYWGQGLTVTVSS</p> <p>Heavy chain</p> <p>EVQLVQSGAEVKKPGASVKVSCKASGVNIKDDYMHWVRQAPGQGLEWIGRIDPEDVETKYDPKFQ</p> <p>GRVTITADTSTSTAYMELSSLRSED TAVYYCARSFYSNVNYFDQWGQGLTVTVSSASTKGPSVFPL</p> <p>APSSKSTSGGTAALGCLVKDYFPEPTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQ</p> <p>TYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVTV</p> <p>DVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKAL</p> <p>PAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPV</p> <p>LDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGSGGSGGGSPGGGSEV</p> <p>QLVESGGGLVQPGGSLRLSCAASRDSDEGASCMGWFRQAPGKEREGVAIFNAGERTDYGDSVKGR</p> <p>FTISRDNANTLYLQMNSLRAEDTAVYYCATVWCGSWVARSWGQGLTVTVSS</p> <p>Linker</p> <p>GGGGSPGGGSPGGGS</p> <p>Variable heavy chain (Anti-PD-L1)</p> <p>EVQLVESGGGLVQPGGSLRLSCAASEYIGDRYCAGWFRQAPGKEREGVAMIDRHGIVRYKDSVEGR</p> <p>FTISRNHAGNTLYLQMNSLRAEDTAVYYCAADRPTNVIPCRPEYPMMDYWGQGLTVTVSS</p> <p>CDR1 variable heavy chain (Anti-PD-L1)</p> <p>EYIGDRYCAG</p> <p>CDR2 variable heavy chain (Anti-PD-L1)</p> <p>MIDRHGIV</p> <p>CDR3 variable heavy chain (Anti-PD-L1)</p> <p>DRDPTNVIPCRPEYPMMDY</p> <p>Constant heavy chain (Anti-LAG3)</p> <p>ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPTVSWNSGALTSGVHTFPAVLQSSGLYSLSSV</p> <p>VTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMI</p> <p>SRTPEVTCVTVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE</p> <p>YKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQ</p> <p>PENNYKTTPVLDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG</p> <p>Constant light chain (Anti-LAG3)</p> <p>RTVAAPSVFIFPPSDEQLKSGTASVVCLLNFPYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYS</p> <p>LSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC</p> <p>Variable heavy chain (Anti-LAG3)</p> <p>EVQLVQSGAEVKKPGASVKVSCKASGVNIKDDYMHWVRQAPGQGLEWIGRIDPEDVETKYDPKFQ</p> <p>GRVTITADTSTSTAYMELSSLRSED TAVYYCARSFYSNVNYFDQWGQGLTVTVSS</p> <p>Variable light chain (Anti-LAG3)</p> <p>DIQMTQSPSSLSASVGDRTITCKASENVGTYSVWFQKPKGAPKLLIYGASNRYTGVPSTRFSGSGSG</p> <p>TDFTLTISLQPEDFATYYCGQSYSPYTFGQGTKLEIK</p> <p>CDR1 variable heavy chain (Anti-LAG3)</p> <p>DDYMH</p> <p>CDR2 variable heavy chain (Anti-LAG3)</p> <p>RIDPEDVETKYDPKFQ</p> <p>CDR3 variable heavy chain (Anti-LAG3)</p> <p>SFYSNVNYFDQWGQ</p> <p>CDR1 variable light chain (Anti-LAG3)</p>
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		<p>KASENVGTYVS</p> <p>CDR2 variable light chain (Anti-LAG3)</p> <p>GASNRYT</p> <p>CDR3 variable light chain (Anti-LAG3)</p> <p>GQSYSYPYT</p>
PB-68	LAG-3×PD-L1	<p>Variable heavy chain region (Anti-LAG-3)</p> <p>QVQLVQSGGGVVPGRSLRLSCAASGFTFSYDTHWVRQAPGKGLEWVAVISYDGSNKYYADSVK</p> <p>GRFTISRDN SKNTLYLHMNSLRAEDTAMYYCARERGWDFDIWGQGTITVTVSS</p> <p>Constant heavy chain region-1 (Anti-LAG-3)</p> <p>ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTWNSGALTSVHTFPAVLQSSGLYSLSSV</p> <p>VTVPSSSLGTQTYICNVNHKPSNTKVDKRV</p> <p>Constant heavy chain region-2 (Anti-LAG-3)</p> <p>APELGRGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYN</p> <p>STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK</p> <p>Constant heavy chain region-3 (Anti-LAG-3)</p> <p>GQPREPQVYTKPPSREEMTKNQVSLKCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLY</p> <p>SKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK</p> <p>Constant heavy chain region-1 (Anti-PD-L1)</p> <p>ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTWNSGALTSVHTFPAVLQSSGLYSLSSV</p> <p>VTVPSSSLGTQTYICNVNHKPSNTKVDKRV</p> <p>Constant heavy chain region-2 (Anti-PD-L1)</p> <p>APELGRGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYN</p> <p>STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK</p> <p>Constant heavy chain region-3 (Anti-PD-L1)</p> <p>GQPREPQVYTDPPSREEMTKNQVSLTCEVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYS</p> <p>KLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK</p> <p>Variable heavy chain region (Anti-PD-L1)</p> <p>EVQLVQSGAEVKKPGSSVKVSCASGGTFTSYAISWVRQAPGQGLEWMGWIIPTDGNIAQKFQG</p> <p>RVTITADKSTSTAYMELTSLRSEDTAVYYCARHDYTNTVDAFDIWGQGTMTVTVSS</p>
Hanmi bsAb	PD-1×PD-L1	NA
LY-3434172	PD-1×PD-L1	NA
anti-PD-1×PD-L1 BsAb	PD-1×PD-L1	NA
609-Fab-PD-L1-IgG4	PD-1×PD-L1	NA
IMGS-001	PD-L2×PD-L1	NA
Bi-201	PD-L2×PD-L1	<p>QVQLVESGGGLVPGGSLRLSCAASGHTFIIYAIGWFRQAPGKGLEFVATINWSGSMTNYADSVKGR</p> <p>FTISRDN AKNTVY LQMNSLKPDDTAVYYCAAYVGATISTAHSRYDYWGQGTITVTVSSDKTHTCPPC</p> <p>PAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQY</p> <p>NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQV</p> <p>SLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHE</p> <p>ALHNHYTQKSLSLSPGGGGGSGGGGSGGGGSGGGGSGEVQLVESGGGLVPGGSLRLSCAASGRFT</p> <p>SSMTIGWFRQAPGKGLEFVSGIGWTSGLTVYADSVKGRFTISRDN AKNSMYLQMNSLRAEDTAVYY</p> <p>CAADSMNRGQFDYWGQGTITVTVSS</p>

LY-3415244	TIM-3×PD-L1	<p>Anti-PD-L1 Heavy chain</p> <p>QVQLVQSGAEVKKPGSSVKVSCKASGGTFSSYAISWVRQAPQGQLEWMGGIIPFGTANYAQKFQGR VTITADKSTSTAYMELSSLRSEDTAVYYCARSPDYSPYYYYGMDVWGQGTTVTVSSASTKGPSVFPL APSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLKSVVTVPSSSLGTQ TYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVTVV SVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKCKVSNKALP APIEKTISKAKGQPREPQVYVLPSPRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYLTWPPV LDSGGSFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGK</p> <p>Anti-TIM3 Heavy chain</p> <p>EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYYMSWVRQAPGKGLEWVSAISGNGKSTYYADSVKG RFTISRDN SKNTLYLQMNSLRAEDTAVYYCARYYNTGFDLWGQGLTVTVSSASTKGPSVFPEAPSSK STSGGTAALGCLVTDYFPEPVTVSWNSGALTSGVHTFPAVLESSGLYSLVSVTVPSSSLGTQTYICN VNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVTVVSVSHE DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYCKCKVSNKALPAPIEK TISKAKGQPREPQVYVLPSPRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDS GSFALVSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGK</p> <p>Anti-PD-L1 Light chain</p> <p>QSVLTQPPSASGTPGQRTVISCSSGSSNIGSNTVNWYQQLPGTAPKLLIYGNSNRPSGVPDRFSGSKSG TSASLAISGLQSEDEADYYCQSYDSSLGSGVFSGGKIKLTVLGQPKAAPSVTLFPPSSEELQANKATLV LISDFYPGAVTVAWKADSSPVKAGVETTTTPSKQSNKYAAESELSTPEQWKSRSYSCQVTHEGST VEKTVAPAECS</p> <p>Anti-TIM3 Light chain</p> <p>DIVMTQSPSSLSASVGDGVITTCQASQDIYNLWYQKPKGAPKLLIYYASSIVSGVPSRFSGSGSGT DFTLTISSLQPEDFATYYCQQAASSFPPTFGQGTKLEIKRTVAAPSVFIFPPSDEQLKSGTARVGCCLN NFPYBREAKVQWKVDNALQSGNSQESVTEQDSKSTYSLRSALTLSKADYEKHKVYACEVTHQGLSSPV TKSFNRGEC</p> <p>Anti-PD-L1 Variable heavy chain</p> <p>QVQLVQSGAEVKKPGSSVKVSCKASGGTFSSYAISWVRQAPQGQLEWMGGIIPFGTANYAQKFQGR VTITADKSTSTAYMELSSLRSEDTAVYYCARSPDYSPYYYYGMDVWGQGTTVTVSS</p> <p>Anti-TIM3 Variable heavy chain</p> <p>EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYYMSWVRQAPGKGLEWVSAISGNGKSTYYADSVKG RFTISRDN SKNTLYLQMNSLRAEDTAVYYCARYYNTGFDLWGQGLTVTVSS</p> <p>Anti-PD-L1 Variable light chain</p> <p>QSVLTQPPSASGTPGQRTVISCSSGSSNIGSNTVNWYQQLPGTAPKLLIYGNSNRPSGVPDRFSGSKSG TSASLAISGLQSEDEADYYCQSYDSSLGSGVFSGGKIKLTVLG</p> <p>Anti-TIM3 Variable light chain</p> <p>DIVMTQSPSSLSASVGDGVITTCQASQDIYNLWYQKPKGAPKLLIYYASSIVSGVPSRFSGSGSGT DFTLTISSLQPEDFATYYCQQAASSFPPTFGQGTKLEIK</p>
BTP-21	TIGIT×PD-L1	<p>AS19584VH28 sdAb-Fc (IgG4)</p> <p>EVQLVESGGGLVQPGGSLRLSCAASGYKYGVYSMGWFRQAPGKLEGVSAICSGGRRTTYSVSKGR FTISRDN SKNTLYLQMNSLRAEDTAVYYCAARPLWTGDCDLSSSWYKTWGQGLTVTVSSSESKYGP P CPPCPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVTVVDVSDQEDPEVQFNWYVDGVEVHNAKTKP R EEQFNSTYRVVSVLTVLHQDWLNGKEYCKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEEMT KNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSGGSFFLYSRLTVDKSRWQEGNVFSCS</p>

		<p>VMHEALHNHYTQKSLSLGLK</p> <p>IgG1 hinge region</p> <p>EPKSCDKTHTCPPCP</p>
HLX-301	TIGIT×PD-L1	NA
HB-0036	TIGIT×PD-L1	NA
TIGIT-Fc-93-V H6	TIGIT×PD-L1	<p>Heavy chain</p> <p>EVKLVESGGGLVQPGGSLRLSCAASGFTFSDYMYWVRQAPGKRLEWVASITKGGGSTYYPTLKG RFTISRDNNAKNSLYLQMNRLRAEDTAVYYCARQSSYDFVMDYWGQGTITVTVSSASTKGPSVFPLAP SSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTY ICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDV SHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP IEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLD SDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGKGGGGSGGGSGGGSGG GGSEVQLVESGGGLVQPGGSLRLSCAASGFTFTFRHYVMGWFRQAPGKEREFVAAISWSGSGSYA DSVKGRFTISRDNKNTVYLQMNSLRAEDTAVYYCAADMTRMSQASREYDYWGQGLTVTVSS</p> <p>Light chain</p> <p>DIVMTQSPSSLSASVGDRVTITCKASQDQDVTAVAWYQQKPGKAPKLLIYWASARHTGVPSRFSGSGS GTDFTFTISSLQPEDATYYCQYSNYPLTFGQGTGLEIKRTVAAPSVFIFPPSDEQLKSGTASVCLLN NFYPREAKVQWKVDNALQSGNSQESVTEQDSKSTYLSSTLTLSKADYEKHKVYACEVTHQGLSS PVTCSFNRGEC</p> <p>Variable heavy chain (Anti-TIGIT)</p> <p>EVKLVESGGGLVQPGGSLRLSCAASGFTFSDYMYWVRQAPGKRLEWVASITKGGGSTYYPTLKG RFTISRDNNAKNSLYLQMNRLRAEDTAVYYCARQSSYDFVMDYWGQGTITVTVSS</p> <p>Variable light chain (Anti-TIGIT)</p> <p>DIVMTQSPSSLSASVGDRVTITCKASQDQDVTAVAWYQQKPGKAPKLLIYWASARHTGVPSRFSGSGS GTDFTFTISSLQPEDATYYCQYSNYPLTFGQGTGLEIK</p> <p>CDR1 variable heavy chain (Anti-TIGIT)</p> <p>DYYMY</p> <p>CDR2 variable heavy chain (Anti-TIGIT)</p> <p>SITKGGGSTYYPTLKG</p> <p>CDR3 variable heavy chain (Anti-TIGIT)</p> <p>QSSYDFVMDY</p> <p>CDR1 variable light chain (Anti-TIGIT)</p> <p>KASQDQDVTAVA</p> <p>CDR2 variable light chain (Anti-TIGIT)</p> <p>WASARHT</p> <p>CDR3 variable light chain (Anti-TIGIT)</p> <p>QYSNYPLT</p> <p>Variable heavy chain (Anti-PD-L1)</p> <p>EVQLVESGGGLVQPGGSLRLSCAASGFTFTFRHYVMGWFRQAPGKEREFVAAISWSGSGSYADSV KGRFTISRDNKNTVYLQMNSLRAEDTAVYYCAADMTRMSQASREYDYWGQGLTVTVSS</p> <p>CDR1 variable heavy chain (Anti-PD-L1)</p> <p>RHYVMG</p> <p>CDR2 variable heavy chain (Anti-PD-L1)</p>

		<p>AISWSGSGSYADSVKG</p> <p>CDR3 variable heavy chain (Anti-PD-L1)</p> <p>DMTTRMSQASREYDY</p>
P-O-T	TIGIT×PD-L1	<p>Heavy chain (Anti-PDL1 and Anti-TIGIT)</p> <p>QVQLVQSGAEVKKPGASVKVSCKASGYTFTSYWMHWVRQAPGQGLEWMGRITPSSGFAMYNEKF KNRVTMTRDTSTSTVYMELSSLRSEDTAVYYCARGGSSYDYFDYWGQGTITVTVSSGGGGSSGAPRF LTRPKAFVVSVGKDATLSSQIVGNPFPQVSWEKDKQPVTAGVRFRLAQDGDLYRLKILDQLSDSGQ YVSRARNAIGEAFACLGQVDAEAGGGGSEVQLVQSGAEVKKPGASVKVSCKASGYTFTNYWMH WVRQAPGQGLEWMGRIDPDSTGSKYNEKFKTRVTMTRDTSTSTVYMELSSLRSEDTAVYYCAREG AYGYFDYWGQGTITVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTS GVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPE LLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTY RVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTC LVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALH NHYTQKSLSLSPGK</p> <p>Light chain 1 (Anti-PDL1 and Anti-TIGIT)</p> <p>DIVLTQSPASLAVSPGQRATITCRASESVSIHGTHLMHWYQQKPGQPPLLIYAASKLESGVPARFSGS GSGTDFTLTINPVEAEDTANYYCQQSFEDPLTFGQGTKLEIKGGGSGIPPKIECLPIDISIDEGKVLTV ASAFTGEPTPEVTWSTGGRKIHSQEQRFHIENTDDLTTLLIKDVQKQDGGLYTLTLRNEFGSDSATV NIHIRSI</p> <p>Light chain 2 (Anti-PDL1 and Anti-TIGIT)</p> <p>DIQMTQSPSSLSASVGDRVITTCRASENIYSYLAWYQQKPGKSPKLLIYNARTLAEGVPSRFSGSGSGT DFTLTISSLQPEDFATYYCQYHSGSPLPFGGGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNPF YPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTLSKADYEKHKVYACEVTHQGLSSPV TKSFNRGEC</p> <p>Heavy chain (Anti-TIGIT)</p> <p>EVQLVQSGAEVKKPGASVKVSCKASGYTFTNYWMHWVRQAPGQGLEWMGRIDPDSTGSKYNEKF KTRVTMTRDTSTSTVYMELSSLRSEDTAVYYCAREGAYGYFDYWGQGTITVTVSSASTKGPSVFPL APSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQ TYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVV DVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPV LDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK</p> <p>Light chain (Anti-TIGIT)</p> <p>DIQMTQSPSSLSASVGDRVITTCRASENIYSYLAWYQQKPGKSPKLLIYNARTLAEGVPSRFSGSGSGT DFTLTISSLQPEDFATYYCQYHSGSPLPFGGGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNPF YPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTLSKADYEKHKVYACEVTHQGLSSPV TKSFNRGEC</p> <p>Variable heavy chain (Anti-TIGIT)</p> <p>EVQLVQSGAEVKKPGASVKVSCKASGYTFTNYWMHWVRQAPGQGLEWMGRIDPDSTGSKYNEKF KTRVTMTRDTSTSTVYMELSSLRSEDTAVYYCAREGAYGYFDYWGQGTITVTVSS</p> <p>Variable light chain (Anti-TIGIT)</p> <p>DIQMTQSPSSLSASVGDRVITTCRASENIYSYLAWYQQKPGKSPKLLIYNARTLAEGVPSRFSGSGSGT DFTLTISSLQPEDFATYYCQYHSGSPLPFGGGTKVEIK</p>

		<p>Heavy chain (Anti-PDL1)</p> <p>QVQLVQSGAEVKKPGASVKVSCKASGYTFTSYWMHWVRQAPGQGLEWMGRITPSSGFAMYNEKF KNRVTMTRDTSTSTVYMELSSLRSEDNAVYYCARGGSSYDYFDYWGQGTITVTVSSASTKGPSVFPL APSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQ TYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVTVV DVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPV LDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEALHNHYTQKSLSLSPGK</p> <p>Light chain (Anti-PDL1)</p> <p>DIVLTQSPASLA VSPGQRATITCRASESVSIHGTHLMHWYQQKPGQPPLLIYAASKLESVGPARGSGS GSGTDFTLTINPVEAEDTANYYCQQSFEDPLTFGQGTGLEIKRTVAAPSVFIFPPSDEQLKSGTASVVC LLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKSTYLSSTLTLSKADYEKHKVYACEVTHQG LSSPVTKSFNRGEC</p> <p>Variable heavy chain (Anti-PDL1)</p> <p>QVQLVQSGAEVKKPGASVKVSCKASGYTFTSYWMHWVRQAPGQGLEWMGRITPSSGFAMYNEKF KNRVTMTRDTSTSTVYMELSSLRSEDNAVYYCARGGSSYDYFDYWGQGTITVTVSS</p> <p>Variable light chain (Anti-PDL1)</p> <p>DIVLTQSPASLA VSPGQRATITCRASESVSIHGTHLMHWYQQKPGQPPLLIYAASKLESVGPARGSGS GSGTDFTLTINPVEAEDTANYYCQQSFEDPLTFGQGTGLEIK</p>
HuPL721-T235 3-scFab	TIGIT×PD-L1	NA
PM-1022	TIGIT×PD-L1	NA
CX694	CD28×PD-L1	<p>Variable heavy chain (Anti-PD-L1)</p> <p>EVQLLESGGGEVQPGGSLRLSCAASGGIFAIPISWYRQAPGKQREWSTTTSSGATNYAESVKGRFT ISRDNANKNTLYLQMSSLRAEDNAVYYCNVFEYWGQGTITVTVKP</p> <p>Variable heavy chain (Anti-CD28)</p> <p>EVQLVQSGGGLVQTGGSLRLSCAASGRMFSNYAMGWFRQAPGKEREFVAAINYRRDSADYADSVK GRFTISRDNANKNTVYLEMNSLKPEDTAIYYCGFTYAGWASSRRDDYNYWGQGTQVTVKP</p> <p>Fc domain</p> <p>PAPGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNST YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLT CLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEAL HNHYTQKSLSLSPGK</p> <p>Linker</p> <p>GGSGGGGS</p>
Ab-1	CD28×PD-L1	NA
XENP-36764	CD28×PD-L1	<p>Heavy chain-anti-PD-L1</p> <p>EVQLLESGGGLVQPGGSLRLSCAASGFTFSYDMSWVRQAPGKRLEWVSTISSGGSFTHYPDSVKGR FTISRDNANKNTLYLQMNSLRAEDNAVYYCVRMSGDWYFDVWGAGTTVTVSSASTKGPSVFPLAPSS KSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYIC NVNHKPSDTKVDKKVEPKSCDKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVDVKH EDPEVKFNWYVDGVEVHNAKTKPREEYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEWESDGPENNYKTPPVLDSD GSFFLYSKLTVDKSRWEQGVDFSCSVLHEALHSHYTQKSLSLSPGK</p>

		<p>CD28 scFv</p> <p>EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYYMSWVRQAPGKGLEWVSTISESGDSTYYADSVKGR FTISRDNKNTLYLQMNSLRAEDTAVYYCAKSGPGLRQVGFDYWGQGTLLTVSSGKPGSGKPGSGK PGSGKPGSDIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSR FSGSGSGTDFTLTISSLQPEDFATYYCQQSYSTPFTFGQGTKLEIKEPKSSDKTHTCPPCPAPPVAGPSV FLFPPKPKDTLMISRTPEVTCVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKTCLVKGF YPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQK SLSLSPGK</p> <p>Light chain-anti-PD-L1</p> <p>EIVLTQSPGTLISLSPGERATLSCRVSSTSSISNLHWYQQKPGQSPRLIYGTSNLASGVPVRFSGSGSGT DYTLISRLEPEDFAVYYCQQWSSYPLYTFGGGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVCLLN NFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTLSKADYEKHKVYACEVTHQGLSS PVTKSFNRGEC</p>
CDX-527	CD27×PD-L1	<p>Heavy chain</p> <p>EVQLVESGGGLVQPGGSLRLSCAASGGIISTYWMSWVRQAPGKGLEWVANIKQDGSEKYYVDSVK GRFTISRDNKNSLYLQMNSLRVEDTAMYYCARDPVAGASALWGQGTLLTVSSASTKGPSVFPLA PSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQT YICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVD VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALP APIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPV LSDGSFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGKGSSGGGGSEIVMTQSPA TLSPVSPGERATLSCRASQSIRSNLAWYQQKPGQAPRLIYGASTRATGIPARFSGSGSGTEFTLTISLQ SENFVYYCQQYNNWPLTFGCGTKVEIKGGGGSGGGSGGGSGGGGSQVQLVQSGAEVKKPGAS VKVSKASGYTFTGYYIHWRQAPGQCLEWMGWNPNSGGTNSAQKFQDRVTITRVTSINTAYMEL SRLRSDDTAVYFCARDRLVLPWFGEIFDAFDIWGQGTLLTVSS</p> <p>Light chain</p> <p>DIQMTQSPSTLSASVGDRVTITCRASQSIGWLAWYQQKPGKAPKLLIYKASSLESVPSRFSGSGSGT EFTLTISLQPDFAVYYCQQYYGSSRTFGQGTNVEIKRTVAAPSVFIFPPSDEQLKSGTASVCLLNN FYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSTLTLSKADYEKHKVYACEVTHQGLSSP VTKSFNRGEC</p>
28A10 x 2E4	OX40×PD-L1	<p>Variable heavy chain (28A10)</p> <p>QVQLQESGGGLVQAGGSLRLACTTSGGLFNIRPISWYRQPPGMQREWVATIAFGGATNYANSIKGRF TASRDNAKNTVYLQMNLKPEDTAVYYCNAFEIWGQGTQVTV</p> <p>CDR1 variable heavy chain (28A10)</p> <p>GGIFNIRP</p> <p>CDR2 variable heavy chain (28A10)</p> <p>IAFGGAT</p> <p>CDR3 variable heavy chain (28A10)</p> <p>NAFEI</p> <p>Variable heavy chain (2E4)</p> <p>QVQLQQSGGGLVQPGGSLSLSCVASGILSHNEMRWYRQNPQKPRDLVAGITSAAYTYYGDFVKGR FTISRDNKNTAYLQMDRLNPEDTGNYICEVSDGDNRYWGQGTQATV</p>
IBI-327	OX40×PD-L1	anti-PD-L1/OX40 bispecific antibody peptide 1

		<p>QVQLVQSGAEVKKPGASVKVSCKASGYTFTSYMHWVRQAPGQGLEWMGIINPSGGSTSYAQKFQGRVTMTRDTSTSTVYMESSLRSEDNAVYYCARDHASSSWYTTHLDLWGRGTLTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSNFGTQTYTCNVDHKPSNTKVDKTVKCCVECPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTFRVSVLTVVHQDWLNGKEYCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPMLDSDGSEFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGSGGGGGSGGGGSQVQLQESGGGLVQPGGSLRLSCAASAYTISRNSMGWFRQAPGKGLEGVAAIESDGSTSYSDSVKGRFTISLDNSKNTLYLEMNSLRAEDNAVYYCAAPKVGLGPRTALGHLAFMTLPALNYWGQGLTVT</p> <p>anti-PD-L1/OX40 bispecific antibody peptide 2</p> <p>DIQMTQSPSSLSASVGDRVTITCQASQDISNYLNWYQQKPGKAPKLLIYDASNLETGVPSRFSGSGGTDFITFTISLQPEDATYYCQQSANYPTYFGGGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKSTSYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTCSFNRGEC</p> <p>PD-L1 nanobody</p> <p>QVQLQESGGGLVQPGGSLRLSCAASAYTISRNSMGWFRQAPGKGLEGVAAIESDGSTSYSDSVKGRFTISLDNSKNTLYLEMNSLRAEDNAVYYCAAPKVGLGPRTALGHLAFMTLPALNYWGQGLTVTVSS</p>
MEDI-1109	OX40×PD-L1	NA
BS-813	OX40×PD-L1	<p>Heavy chain</p> <p>QYQLYQSGAEYKKPGSSYKYSCKASGFTSSSYISWYRQAPGQGLEWIAWIYAGTGGTSYNQKFTGRATITVDESTSTAYMESSLRSEDNAVYYCARHEGVYWFYFDVWGQGTITVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHPKPSNTKVDKKVEPKSCDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVWDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHQDWLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGSGGGGGSGGGGSDIQMTQSPSSLSASVGDRVTITCRASQDIRTYLNWYQQKPGKVPKLLIYYTSRLHSGVPSRFSGSGGTDTYTLTISLQPEDVATYYCQQGNTLPWTFGGGTKEIKGGGGSGGGGGSGGGGSQVQLVQSGAEVKKPGSSVKVSCKASGYTFTSYIMHWVRQAPGQGLEWIGYINPYNSGTYNEKFKGRVTTISDKSTSTAYMESSLRSEDNAVYYCAHYYGSTFTMDYWGQGTITVTVSS</p> <p>Light chain</p> <p>EIVLTQSPATLSLSPGERATLSCSASSSVSYMHWYQQKPGQAPRPWIYDTSNLSAGFPARFSGSGGTDFTLTISLPEDEFAVYYCHQRSSYPWTFGGGTKEIKRTVAAPSVFIFPPSDEQLKSGTASVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKSTSYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTCSFNRGEC</p>
KN-052	OX40×PD-L1	NA
EMB-09	OX40×PD-L1	NA
L52-2D7H232	OX40×PD-L1	<p>L52-2D7H232 Heavy chain</p> <p>DVQLVESGGGLVQPGGSLRLSCAASGFTASIGMRWFRQAPGKGREL VAGIVDAGSATYYADSVKGRFTISRDNAKNTVYQLQMNSLRAEDNAVYYCARGNHEGEVGLDYWGQGTQVTVSASEFGGGGGSGGGGGSDVQLVESGGGLVQPGGSLRLSCAASGFTASIGMRWFRQAPGKGREL VAGIVDAGSATY YADSVKGRFTISRDNAKNTVYQLQMNSLRAEDNAVYYCARGNHEGEVGLDYWGQGTQVTVSASGGGGSGGGGGSGGGGSLEQVQLVESGGGLVQPGGSLRLSCTVSGIDLSSYDMTWVRQAPGKGLEYIGYISYVSRITYYADSVKGRFTISKDTSKNTVYQLQMNSLRAEDNAVYYCARDRPDGAATNLWGQGLTVTVS</p>

		<p>SASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTWNSGALTSKVHPTFAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSP</p> <p>L52-2D7H232 Light chain</p> <p>DIQMTQSPSTLSASVGDRVTITCQSSQNVYSNNRLSWYQQKPGKAPKLLIYWTSFLASGVPSRFSGSGSGTEFTLTISSLQPDFAFYTCAGGYSGNLYTFGGQGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC</p> <p>L52-2D7H232 Variable light chain</p> <p>DIQMTQSPSTLSASVGDRVTITCQSSQNVYSNNRLSWYQQKPGKAPKLLIYWTSFLASGVPSRFSGSGSGTEFTLTISSLQPDFAFYTCAGGYSGNLYTFGGQGTKLEIKR</p> <p>CDR1 variable heavy chain region (Anti-OX40)</p> <p>GFTASIYGMR</p> <p>CDR2 variable heavy chain region (Anti-OX40)</p> <p>GIVDAGSATYYAD</p> <p>CDR3 variable heavy chain region (Anti-OX40)</p> <p>GNHEGEVGLDY</p>
ES-101	CD137×PD-L1	NA
MCLA-145	CD137×PD-L1	NA
ATG-101	CD137×PD-L1	<p>Heavy chain</p> <p>QVQLVQSGAEVKKPGSSVKVSCKASRGPSTYAIWVRQAPGQGLEWMGRIIPILGIANYAQKFQGRVTITADKSTSTAYMELSSLRSEDTAVYYCARTMEGYGFGNFDYWGQGLTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTWNSGALTSKVHPTFAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYASTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGSGGGSGGGGSQVQLVESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSAISGSGGSTYYADSVKGRFTISRDN SKNTLYLQMNSLR AEDTAVYYCAKTNWGPSDAFDIWGQGTMTVTVSSASTGGGGSGGGSGGGGSQSVLTQPPSASGTPGQRTVISCSTDSIGSYSVNWYQQLPGTAPKLLIYSNNQRPSGVPDRFSGSKSGTSASLAISGLQSEADYYCAAWDDSLNGYVFGTGTKLTVLG</p> <p>Light chain</p> <p>QSALTQPASVSGSPGQSITISCTGTVEVGGYNEVSWYQQHPGKAPKLMYGNNSNRPSGVSNRFSGSGSGNTASLTISGLQAEDADYYCQSYDSSLSGTVFGGGTKLTVLGQPKAAPSVTLFPPSSEELQANKATLVCLISDFYPGAVTVAWKADSSPVKAGVETTPSKQSNKYAASSYLSLTPEQWKSHRYSYSCQVTHEGSTVEKTVAPTECS</p>
ABL-503	CD137×PD-L1	NA
FS-222	CD137×PD-L1	NA
S-095012	CD137×PD-L1	NA
AP-203	CD137×PD-L1	NA
4-1BB (20H4.9) x	CD137×PD-L1	<p>Heavy chain</p> <p>DIQMTQSPSSLSASVGDRVTITCRASQDVSTAVAWYOOKPGKAPKIAIYSASFLYSGVPSRFSGSGSG</p>

PD-L1		<p>TQFTLTISLQPEDFATYYCOQYLHPATFGOGTKVEIKSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDGGGGSGGGGSQVQLQQWGAGLLKPSETLSLTCAVYGGSFSGYYWSWIRQSPEKGLEWIGEINHGGYVTYNPSLESRVTISVDTSKNQFSLKLSSVTAADTAVYYDARDYGPNGYDWYFDLWGRGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVEDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKVEPKSCDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALGAPIEKISKAKGQPREPQVYTLPPCRDELTKNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSCGSFFLYSKLTVDKSRWQOGNVFSCSVMEALHNHYTOKSLSLSP</p> <p>Light chain</p> <p>EVQLVESGGGLVQPGGSLRLSCAASGFTFSDSWIHWVRQAPGKGLEWVAWISPYGGSTYYADSVKGRFTISADTSKNTAYLQMNSLFAEDTAVYYCARRHWPGGFDYWGQGLTVTVSSASVAAPSVFIFPPSECI LKSGTASVVCLLNNFYPREAKVOWKVDNALOSGNSQESVTEODSKDSTYSISSTLTLSKADYEKHKVYACEVTHOGLSSPVTKSFNRGEC</p>
GEN-1046	CD137×PD-L1	NA
LBL-024	CD137×PD-L1	<p>Variable heavy chain (Anti-4-1BB)</p> <p>QVQLQESGGGLVQPGGSLRLSCAVSGFTFSSYAMHWVRQAPGKCLEWVAVISYDGSKKWAYADSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCARNQGSGLYLYYYMDVWGKGTITVTVSS</p> <p>CDR1 variable heavy chain (Anti-4-1BB)</p> <p>SYAMH</p> <p>CDR2 variable heavy chain (Anti-4-1BB)</p> <p>VISYDGSKKWAYADSVKG</p> <p>CDR3 variable heavy chain (Anti-4-1BB)</p> <p>NQGSGLYLYYYMDV</p> <p>Variable light chain (Anti-4-1BB)</p> <p>QSALTQPRSVSGSPGQSVTISCTGTSSDVGGYNYVSWYQQLPGKAPKVIIEVSNRPSGVSNRFSGSKSGNTASLTISGVQSEADYYCSSYTSSTFYVFGCGTQLTVL</p> <p>CDR1 variable light chain (Anti-4-1BB)</p> <p>TGTSSDVGGYNYVS</p> <p>CDR2 variable light chain (Anti-4-1BB)</p> <p>EVSNRPS</p> <p>CDR3 variable light chain (Anti-4-1BB)</p> <p>SSYTSSTFYV</p> <p>Variable heavy chain (Anti-PD-L1)</p> <p>EVQLQESGPGLVKPSQTLSTCTVSGDSFSSGYWNWIRQHPGKLEYIGYVSYTGSTYYIPSLKSRVTISRDTSKNQFSLKLSSVTAADTAVYYCAGYRDWLHGYFDYWGQGTITVTVSS</p> <p>CDR1 variable heavy chain (Anti-PD-L1)</p> <p>SGYWN</p> <p>CDR2 variable heavy chain (Anti-PD-L1)</p> <p>YVSYTGSTYYIPSLKS</p> <p>CDR3 variable heavy chain (Anti-PD-L1)</p> <p>YRDWLHGYFDY</p> <p>Variable light chain (Anti-PD-L1)</p> <p>DIQMTQSPSSLSASVGDRVTITCKASQNVMDNVAWYQQKPGKAPKRLIYSASYRFGVPSRFSGSGS</p>

		<p>GTEFTLTISLQPEDFATYYCQQYNGYPLTFGQGGTKLEIK</p> <p>CDR1 variable light chain (Anti-PD-L1)</p> <p>KASQNVMDNVA</p> <p>CDR2 variable light chain (Anti-PD-L1)</p> <p>SASYRFS</p> <p>CDR3 variable light chain (Anti-PD-L1)</p> <p>QQYNGYPLT</p>
9EN-FM	CD137×PD-L1	<p>First polypeptide chain</p> <p>QVQLVQSGAEVKKPGASVKVSKASGYTFTSYWMHWVRQAPGQGLEWMGRIGPNSGFTSYNEKF KNRVTMTRDTSTSTVYMESSLRSEDVAVYYCARGGSSYDYFDYWGQGTITVTVSSGGGSGGGGS GGGGSDIVLTQSPASLAVSPGQRATITCRASESVSIHGTHLMHWYQKPKGPPLLIYAASNLESGVP ARFSGSGSGTDFTLTINPVEAEDTANYYCQQSFEDPLTFGQGGTKLEIKGGGSGGGSGGGSGGGG SEVQLVQSGAEVKKPGSSVKVSKASGYTFTSYGLNHWVRQAPGQRLWGMGINPGSGYTKYNEKF EGRVTITADKSTSTAYMELSSLRSEDVAVYFCARWGLGRNWNFAVWGQGTITVTVSSASTKGPSVFP LAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGT QTYICNVNHKPSNTKVDKKVEPKCDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVV VDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKA LGAPIEKISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTP PVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK</p> <p>Second polypeptide chain</p> <p>DIVMTQSPDSLAVSLGERATINCRASESVDSYGNTFMHWYQKPKGPPLLIYRASQLESGVPDRFS GSGSGTDFTLTISLQAEADVAVYYCQQSNEDPLTFGQGGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASV VCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKSTYLSSTLTLSKADYEKHKVYACEVTH QGLSSPVTKSFNRGEC</p>
PM-1003	CD137×PD-L1	NA
QL-301	CD137×PD-L1	NA
MF6797xMF77 02	CD137×PD-L1	<p>Variable heavy chain (Anti-CD137)</p> <p>QITLKESGPTLVKPTQTLTLCTFSGFSLSTTGVGVNWIRQPPGEALEWLALIYWNDTTYSPSLKSRL TITKDTSKNQVVLMTNMDPVDATYYCAHEGIIGFLGGNWFDPWGQGTITVTVSS</p> <p>CDR1 variable heavy chain (Anti-CD137)</p> <p>TTGVGVN</p> <p>CDR2 variable heavy chain (Anti-CD137)</p> <p>LIYWNDTTYSPSLKS</p> <p>CDR3 variable heavy chain (Anti-CD137)</p> <p>EGIIIGFLGGNWFDP</p> <p>CDR1 variable heavy chain (Anti-PD-L1)</p> <p>DRKYVTNWVFAEDFQH</p> <p>CDR2 variable heavy chain (Anti-PD-L1)</p> <p>WINPNTGNPTYAQGFTG</p> <p>CDR3 variable heavy chain (Anti-PD-L1)</p> <p>NYAIN</p> <p>Variable heavy chain (Anti-PD-L1)</p> <p>QVQLVQSGSELKKPGASVKVSKASGYTFTNYAINWVRQAPGQGLEWMGWINPNTGNPTYAQGFT GRFVFSLDTSVSTAYLQISSLKAEDTAVYYCARDKYVTNWVFAEDFQHWGRGTLTVTVSS</p>

BH-3120	CD137×PD-L1	NA
euPD-1×94 kvt LHC 218	CD137×PD-L1	<p>FLESPDRPWNAPTFSBALLVAEGDNATFTCSFSNASESFHVVWHRESPSGQTDTLAAFPEDRSQPGQ DHRFRVTRLNPNRDFHMSVVRARNDSTGYVCGVISLAPKIQIKESLRAELRVTERRAEVPHTAHPSPS PRPAGQFQTLVVGASGGGGSGGGGSDKTHTCPPCAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVV VDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCAVSNKA LPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTP PVLDSGDSFFLYSKLTVDKSRWQQGNVFCSSVMHEALHNHYTQKSLSLSPGSGGGGGSGGGGSDIVMT QSPAFLSVTPGEKVTITCRASQTISDYLHWYQQKPDQAPKLLIKYASQSSISGIPSRFSGSGSGTDFTFTIS SLEAEDAATYYCQDGHSWPPTFGQGTKLEIKGSTSGSGKPGSGEGSTKGQVQLVQSGAEVKKPGAS VKLSCKASGYTFSSYWMHWVRQAPQGQGLEWIGEINPGNGHTNYNEKFKSRVTMTRDTSTSTAYME LSSLRSEDTAVYYCARSFKTARAFAYWGQGLTVTVSS</p>
PR-004270	CD137×PD-L1	<p>Heavy chain</p> <p>DIQMTQSPSTLSASVGDRVTVTCRASQSIYIWLAWYQQKPGKAPNLLIYKASSLETGVPSRFSGSGSG TEFTLTISLQPDFATYYCQQYYGSSRTFGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLN NFYPREAKVQWKVDNALQSGNSQESVTEQDSKSTYLSSTLTLSKADYEKHKVYACEVTHQGLSS PVTKSFNRGCEPKSSDKTHTPPPEVQLVESGGGVVQPGGSLRLSCAASGFTFSNYAMTWVRQAP EKGLEWVSSISGSGVSTYYADSVKGRFTISRDNSTNTLYLQMTRLTAEDTAVYFCAKEGSSETDDHY YNVDVWGQGTITVTSSEPKSSDKTHTCPPCAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVS HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI EKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDS DGSFFLYSKLTVDKSRWQQGNVFCSSVMHEALHNHYTQKSLSLSPGK</p> <p>Light chain</p> <p>EVQLVESGGGLVQPGGSLRLSCAASGFTFSYWMHWVRQAPGKLEWVANIKQEGSEKYYVDSVK GRFTISRDNKNSLYLQMNSLRAEDTAVYYCARDRAVAGAFDIWGQGTMTVTVSSASTKGPSVFPLA PSSKSTSGGTAALGCLVKDYFPEPTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQT YICNVNHKPSNTKVDKKVEPKSC</p>
HK-010	CD137×PD-L1	NA
1923Ab18	CD137×PD-L1	<p>Light chain</p> <p>EIVMAQSPATLSLSPGERATLSCRASQSVSSYLSWFQKPGQAPRLLIYGASTRATGIPARFGGSGSG TDFTLTISLQPEDFAVYYCQQDYNLPYTFGQGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLN NFYPREAKVQWKVDNALQSGNSQESVTEQDSKSTYLSSTLTLSKADYEKHKVYACEVTHQGLSS PVTKSFNRGEC</p> <p>Heavy chain</p> <p>QVQLVQSGAEVKKPGASVKVCSKASGYFTTSYDINWVRQATGQGLEWMGMWNPNSGITGYAQR QGRVTMTRDTSISTAYMELSSLRSEDTAVYYCARHRWGKGYLDLWGRGTLTVSSASTKGPSVFPL APSSKSTSGGTAALGCLVKDYFPEPTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQ TYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVV DVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKAL PAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPV LDSGDSFFLYSKLTVDKSRWQQGNVFCSSVMHEALHNHYTQKSLSLSPGSGGGGGSGGGGSGVQV LVESGGGVVQGRSLRLSCAASGFTFSNYGMHWVRQAPGKCLEWVAIIWYDGINKYYADSVKGRFT ISRDNSTNTLYLQMNSLKAEDTAVYYCARDQDYDILTGYKEDYDFWQGTITVTVSSGGGGSGG GGSGGGGGSGGGSSYELTQPPSVSPGQTARITCSGDALPKKYAYWYQQKSGQAPVLYIEDSKRP SGIPERFSGSSSGTMTALTISGAQVEDEADYYCYSTDSSGNRVFGCGTKLTVL</p>

KY-1055	ICOS×PD-L1	Variable heavy chain (Anti-ICOS) EVQLVESGGGVVRPGGSLRLSCVASGVTFDDYGMSWVRQAPGKGLEWVSGINWNGGDTDYSDSV KGRFTISRDNAKNSLYLQMNSLRAEDTALYYCARDFYGSGSYHVPFDYWGQGILVTVSS Variable light chain (Anti-ICOS) EIVLTQSPGTLSSLSPGERATLSCRASQSVSRSYLAWYQQKRGQAPRLLIYGASSRATGIPDRFSGDGS TDFTLISRLEPEDFAVYYCHQYDMSPFTFGPGTKVDIK CDR1 variable heavy chain (Anti-ICOS) GVTFDDYG CDR2 variable heavy chain (Anti-ICOS) INWNGGDT CDR3 variable heavy chain (Anti-ICOS) ARDFYGSGSYHVPFDY CDR1 variable light chain (Anti-ICOS) QSVSRSY CDR2 variable light chain (Anti-ICOS) GAS CDR3 variable light chain (Anti-ICOS) HQYDMSPF
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