[Figure 1]

SEQ ID NO: 1 - Amino acid sequence of a heavy chain of the anti-HER2 antibody

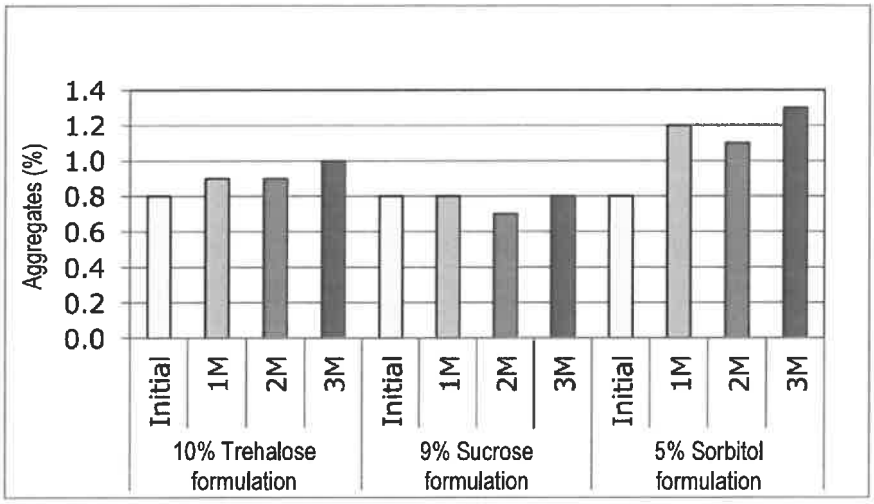
EVQLVESGGGLVQPGGSLRLSCAASGFNIKDTYIHWVR
QAPGKGLEWVARIYPTNGYTRYADSVKGRFTISADTSK
NTAYLQMNSLRAEDTAVYYCSRWGGDGFYAMDYWGQGT
LVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVT
VPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHT
CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVV
VDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYR
VVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA
KGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDI
AVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

[Figure 2]

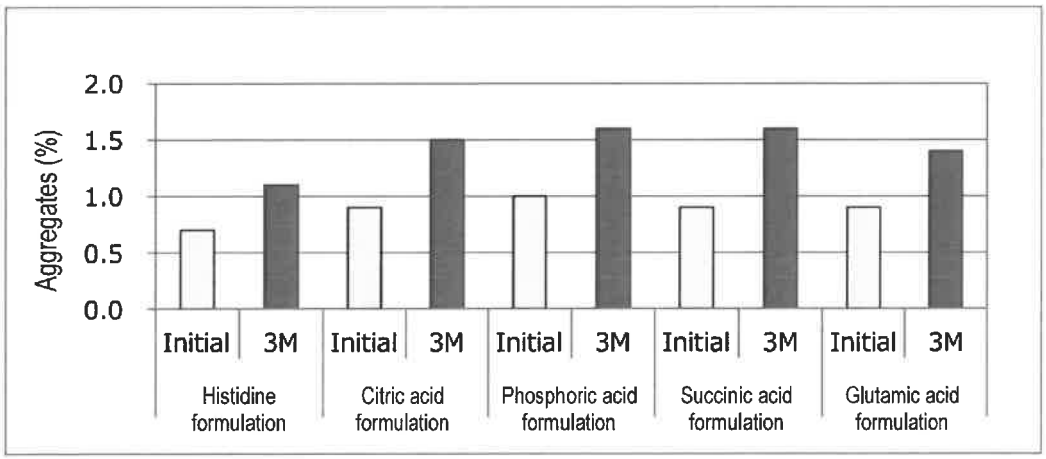
SEQ ID NO: 2 - Amino acid sequence of a light chain of the anti-HER2 antibody

DIQMTQSPSSLSASVGDRVTITCRASQDVNTAVAWYQQ
KPGKAPKLLIYSASFLYSGVPSRFSGSRSGTDFTLTIS
SLQPEDFATYYCQQHYTTPPTFGQGTKVEIKRTVAAPS
VFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDN
ALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHK
VYACEVTHQGLSSPVTKSFNRGEC

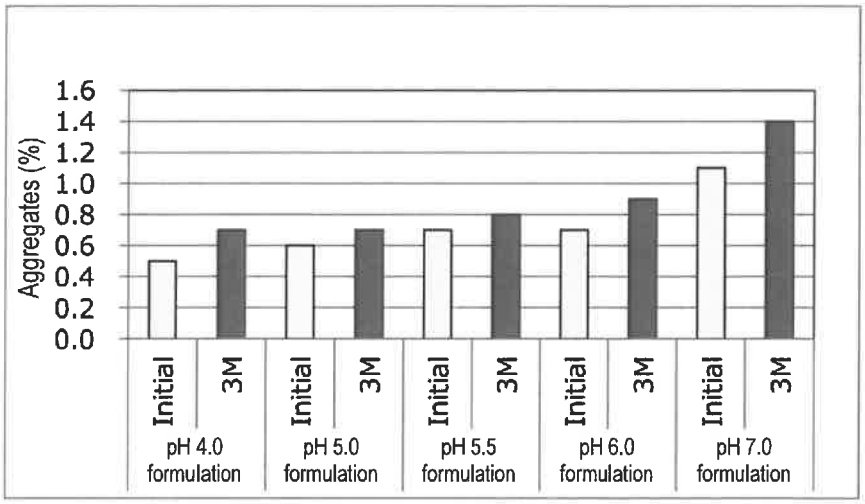
[Figure 3]



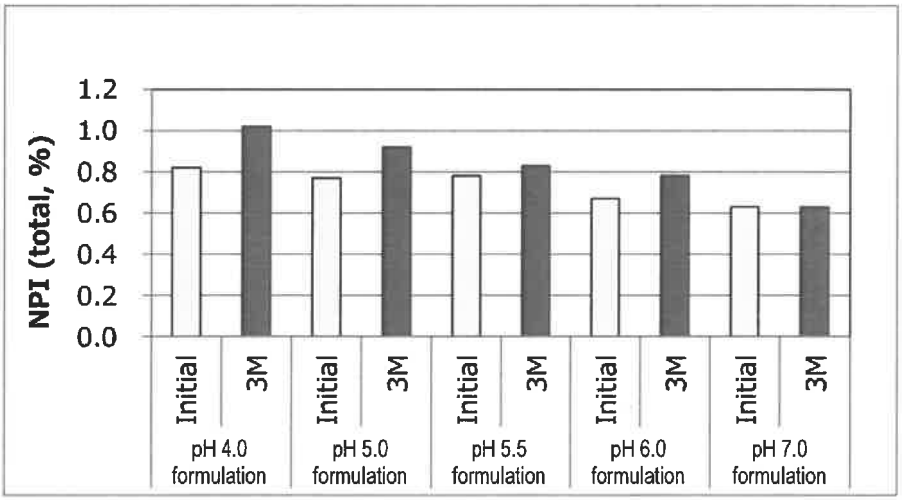
[Figure 4]



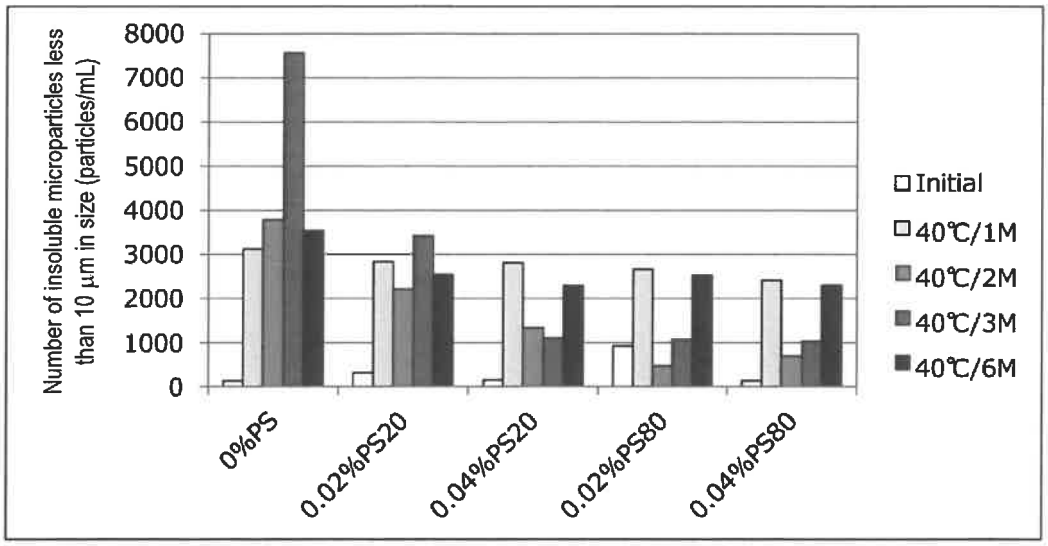
[Figure 5]



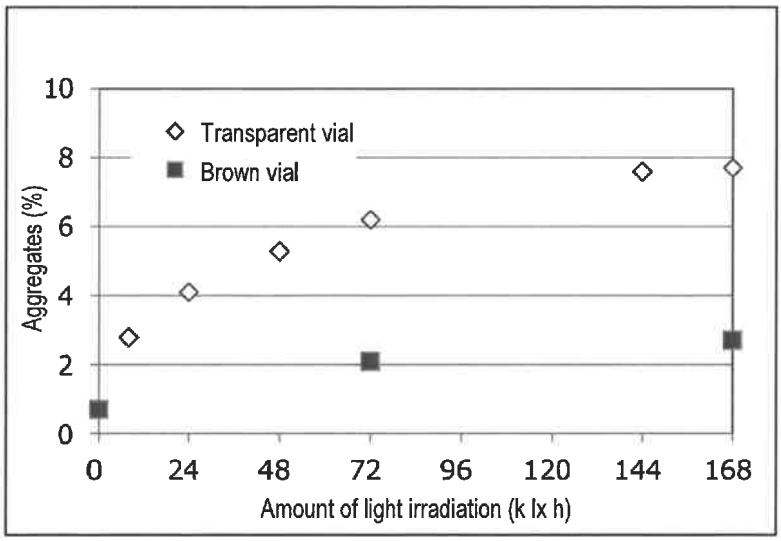
[Figure 6]



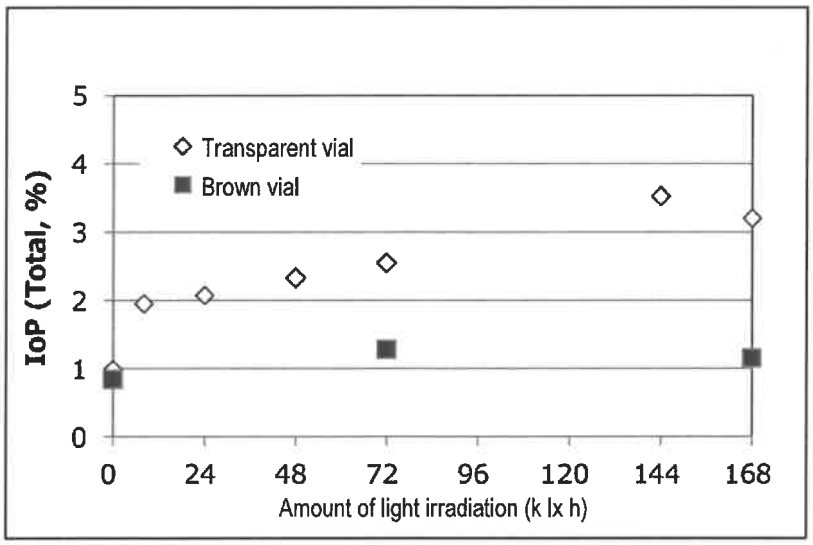
[Figure 7]



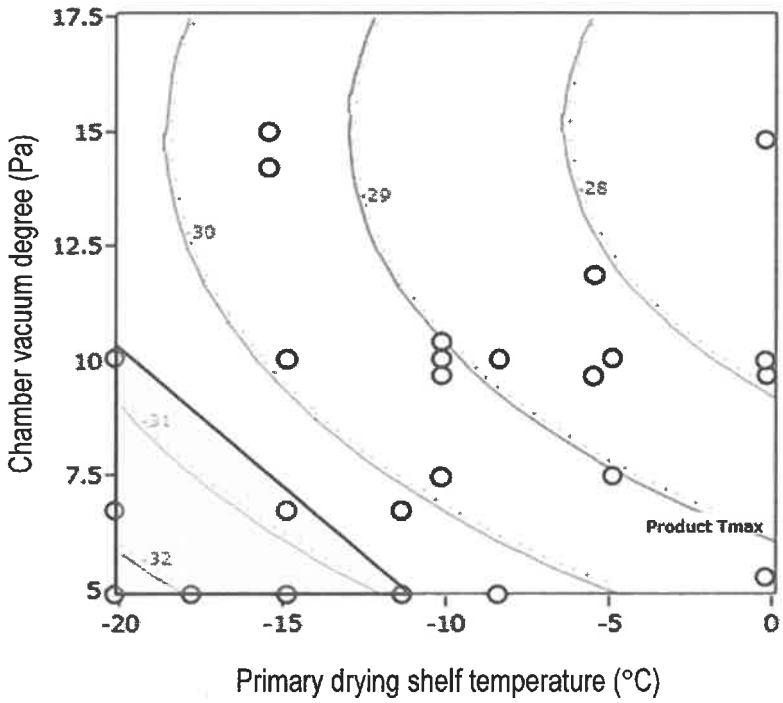
[Figure 8]



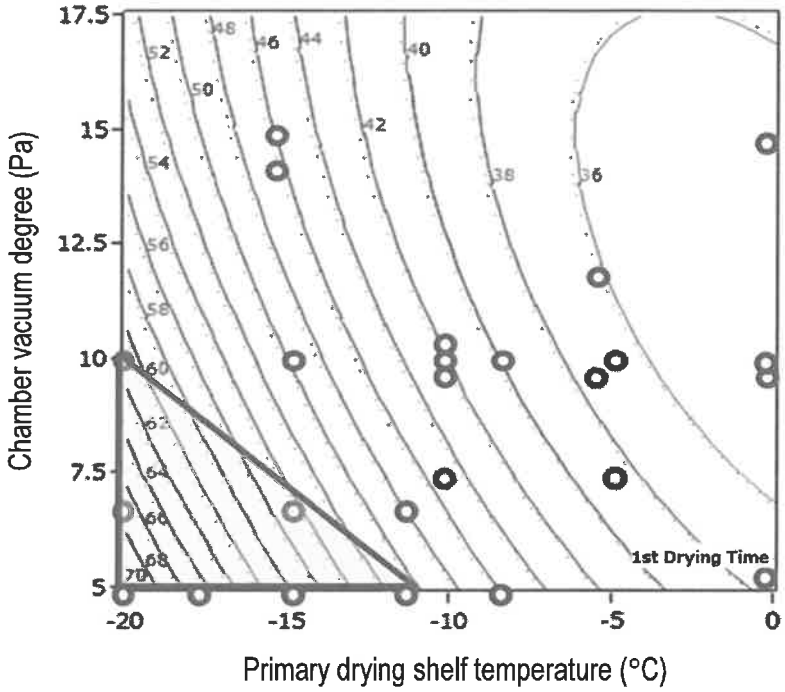
[Figure 9]



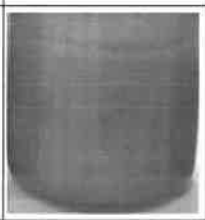
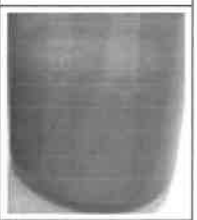
[Figure 10]



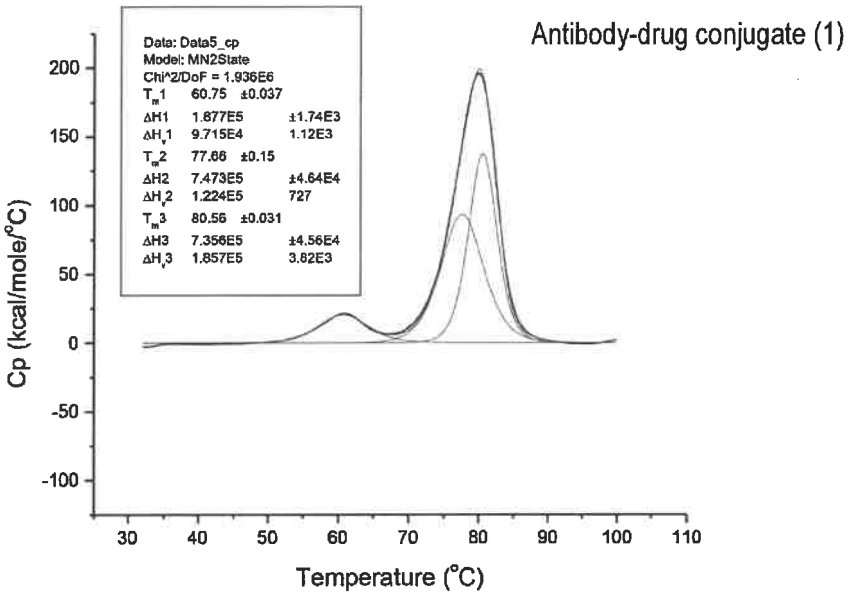
[Figure 11]



[Figure 12]

Shelf temperature	-7.0℃	-5.0℃	-4.0℃	-3.5℃
Product temperature	-7.0℃	-5.0℃	-4.6℃	-4.2℃
Shape of lyophilized cake				
Shelf temperature	-3.0℃	-2.0℃	-0.5℃	0.5℃
Product temperature	-3.4℃	-2.6℃	-1.8℃	-1.5℃
Shape of lyophilized cake				

[Figure 13]


Antibody-drug conjugate (1)
Data: Data5_cp
Model: MN2State
Chi^2/DoF = 1.936E6
Tm1 60.75 ±0.037
ΔH1 1.877E5 ±1.74E3
ΔHv1 9.715E4 1.12E3
Tm2 77.66 ±0.15
ΔH2 7.473E5 ±4.64E4
ΔHv2 1.224E5 727
Tm3 80.56 ±0.031
ΔH3 7.356E5 ±4.56E4
ΔHv3 1.857E5 3.82E3
Cp (kcal/mole/°C)
200
150
100
50
0
-50
-100
30
40
50
60
70
80
90
100
110
Temperature (°C)

[Figure 14]

SEQ ID NO: 3 - Amino acid sequence of a heavy chain of the anti-HER3 antibody

QVQLQQWGAGLLKPSETLSLTCAVYGGSFSGYYWSWIR
QPPGKGLEWIGEINHSGSTNYNPSLKSRVTISVETSKN
QFSLKLSSVTAADTAVYYCARDKWTWYFDLWGRGTLVT
VSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPE
PVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPS
SSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPP
CPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDV
SHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVS
VLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQ
PREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQ
QGNVFSCSVMHEALHNHYTQKSLSLSPGK

[Figure 15]

SEQ ID NO: 4 - Amino acid sequence of a light chain of the anti-HER3 antibody

DIEMTQSPDSLAVSLGERATINCRSSQSVLYSSSNRNY
LAWYQQNPGQPPKLLIYWASTRESGVPDRFSGSGSGTD
FTLTISSLQAEDVAVYYCQQYYSTPRTFGQGTKVEIKR
TVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKA
DYEKHKVYACEVTHQGLSSPVTKSFNRGEC

[Figure 16]

SEQ ID NO: 5 - Amino acid sequence of a heavy chain of the anti-TROP2 antibody

MKHLWFFLLLVAAPRWVLSQVQLVQSGAEVKKPGASVK
VSCKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHSGV
PKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYY
CARSGFGSSYWYFDVWGQGTLVTVSSASTKGPSVFPLA
PSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGV
HTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHK
PSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLF
PPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDG
VEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEY
KCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE
MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP
PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALH
NHYTQKSLSLSPGK

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

[Figure 17]

SEQ ID NO: 6 - Amino acid sequence of a light chain of the anti-TROP2 antibody

MVLQTQVFISLLLWISGAYGDIQMTQSPSSLSASVGDR
VTITCKASQDVSTAVAWYQQKPGKAPKLLIYSASYRYT
GVPSRFSGSGSGTDFTLTISSLQPEDFAVYYCQQHYIT
PLTFGQGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASV
VCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKD
STYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKS
FNRGEC

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

[Figure 18]

SEQ ID NO: 7 - Amino acid sequence of a heavy chain of the anti-B7-H3 antibody

MKHLWFFLLLVAAPRWVLSQVQLVQSGAEVKKPGSSVK
VSCKASGYTFTNYVMHWVRQAPGQGLEWMGYINPYNDD
VKYNEKFKGRVTITADESTSTAYMELSSLRSEDTAVYY
CARWGYYGSPLYYFDYWGQGTLVTVSSASTKGPSVFPL
APSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSG
VHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNH
KPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFL
FPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVD
GVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
YKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE
EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTT
PPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEAL
HNHYTQKSLSLSPGK

Signal sequence (1-19), Variable region (20-141), Constant region (142-471)

[Figure 19]

SEQ ID NO: 8 - Amino acid sequence of a light chain of the anti-B7-H3 antibody

MVLQTQVFISLLLWISGAYGEIVLTQSPATLSLSPGER
ATLSCRASSRLIYMHWYQQKPGQAPRPLIYATSNLASG
IPARFSGSGSGTDFTLTISSLEPEDFAVYYCQQWNSNP
PTFGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVV
CLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDS
TYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSF
NRGEC

Signal sequence (1-20), Variable region (21-128), Constant region (129-233)

[Figure 20]

SEQ ID NO: 9 - Amino acid sequence of a heavy chain of the anti-GPR20 antibody

MKHLWFFLLLVAAPRWVLSEVQLVQSGAEVKKPGASVK
VSCKASGYTFTSYYISWIRQAPGQGLKYMGFINPGSGH
TNYNEKFKGRVTITADKSSSTATMELSSLRSEDTAVYY
CARGAGGFLRIITKFDYWGQGTLVTVSSASTKGPSVFP
LAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTS
GVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVN
HKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVF
LFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV
DGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGK
EYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT
TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEA
LHNHYTQKSLSLSPGK

Signal sequence (1-19), Variable region (20-142), Constant region (143-472)

[Figure 21]

SEQ ID NO: 10 - Amino acid sequence of a light chain of the anti-GPR20 antibody

MVLQTQVFISLLLWISGAYGDTQLTQSPSSLSASVGDR
VTITCRASKSVSTYIHWYQQKPGKQPKLLIYSAGNLES
GVPSRFSGSGSGTDFTLTISSLQPEDFANYYCQQINEL
PYTFGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASV
VCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKD
STYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKS
FNRGEC

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