

FIGURES

Figure 1:

Sequences constant heavy chain (CH), CH₁-CH₃

- wt

ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHT
FPAVLQSSGLYSLSSVTPVSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTC
PPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVE
VHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK
GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPP
VLDSGDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG (SEQ ID
NO:1)

- S239D/I332E

ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHT
FPAVLQSSGLYSLSSVTPVSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTC
PPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVE
VHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAK
GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPP
VLDSGDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG (SEQ ID
NO:2)

- S239D/I332E/H268F/S324T

ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHT
FPAVLQSSGLYSLSSVTPVSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTC
PPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSFEDPEVKFNWYVDGVE
VHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVTNKALPAPEEKTISKAK
GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPP
VLDSGDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG (SEQ ID
NO:3)

- R214K/S239D/K274Q/Y296F/Y300F/L309V/I332E/A339T/V397M

ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHT
FPAVLQSSGLYSLSSVTPVSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCP
PCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFNWYVDGVEV

HNAKTKPREEQFNSTFRVSVLTVVHQDWLNGKEYKCKVSNKALPAP~~E~~EKTISKTKG
QPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPM
LDSDGSFFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG (SEQ ID
NO:4)

- L235V/F243L/R292P/Y300L/P396L/E356D/M358L

ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHT
FPAVLQSSGLYSLSSVTPSSSLGTQTYICNVNHKPSNTKVDK~~R~~VEPKSCDKTHTC
PPCPAPELVGGPSVFLLPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVE
VHNAKTKP~~P~~EEQYNSTLRVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKG
QPREPQVYTLPPSR~~D~~ELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP~~L~~VL
DSDGSFFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG (SEQ ID
NO:5)

Sequences VH

- wt

EVQLLES~~G~~GGGLVQPGGSLRLSCAASGFTFSIYSMNWVRQAPGKGLEWSSIG
SSGGTTYADSVKGRFTISRDN~~S~~KN~~T~~LYLQMNSLRAEDTAVYYCAGSQWLYGMDVW
GQGTTTVTVSS (SEQ ID NO:6)

- L5Q

EVQL~~Q~~ESGGGLVQPGGSLRLSCAASGFTFSIYSMNWVRQAPGKGLEWSSI
GSSGGTTYADSVKGRFTISRDN~~S~~KN~~T~~LYLQMNSLRAEDTAVYYCAGSQWLYGMDV
WGQGTTTVTVSS (SEQ ID NO:7)

- L5Q/W97Y

EVQL~~Q~~ESGGGLVQPGGSLRLSCAASGFTFSIYSMNWVRQAPGKGLEWSSI
GSSGGTTYADSVKGRFTISRDN~~S~~KN~~T~~LYLQMNSLRAEDTAVYYCAGSQYLYGMDV
WGQGTTTVTVSS (SEQ ID NO:8)

Sequences VL

- wt

DIQMTQSPSSLSASVGDRVTITCRSSQRIMTYLNWYQQKPGKAPKLLIFVASH
SQSGVPSRFRGSGSETDFTLTISGLQPEDSATYYCQQSFWTPLTFGGG~~T~~KVEIK
(SEQ ID NO:9)

- F49Y/A51G

DIQMTQSPSSLSASVGDRVITICRSSQRIMTYLNWYQQKPGKAPKLLIYVGS
SH
SQSGVPSRFRGSGSETDFTLTISGLQPEDSATYYCQQSFWTPLTFGGGKVEIK
(SEQ ID NO:10)

- F49Y/A51G/W93F

DIQMTQSPSSLSASVGDRVITICRSSQRIMTYLNWYQQKPGKAPKLLIYVGS
SH
SQSGVPSRFRGSGSETDFTLTISGLQPEDSATYYCQQSFFTPLTFGGGKVEIK (SEQ
ID NO:11)

- M30L/F49Y/A51G/W93F

DIQMTQSPSSLSASVGDRVITICRSSQRILTYLNWYQQKPGKAPKLLIYVGS
SH
QSGVPSRFRGSGSETDFTLTISGLQPEDSATYYCQQSFFTPLTFGGGKVEIK (SEQ
ID NO:12)

- M30L/F49Y/A51G/P80S/W93F

DIQMTQSPSSLSASVGDRVITICRSSQRILTYLNWYQQKPGKAPKLLIYVGS
SH
QSGVPSRFRGSGSETDFTLTISGLQSED SATYYCQQSFFTPLTFGGGKVEIK (SEQ
ID NO:13)

- Y36F/F49Y/A51G

DIQMTQSPSSLSASVGDRVITICRSSQRIMTYLNWFQQKPGKAPKLLIYVGS
SH
SQSGVPSRFRGSGSETDFTLTISGLQPEDSATYYCQQSFWTPLTFGGGKVEIK
(SEQ ID NO:37)

Sequence CL

- wt

RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNS
QESVTEQDSKDSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC
(SEQ ID NO:38)

C0083 VH-L5Q/W97Y/ VL-F49Y A51G W93F:

- C0083 light chain

DIQMTQSPSSLSASVGDRVITICRSSQRIMTYLNWYQQKPGKAPKLLIYVGS
SH
SQSGVPSRFRGSGSETDFTLTISGLQPEDSATYYCQQSFFTPLTFGGGKVEIKRTVA
APSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDS
KDSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC (SEQ ID NO:39)

- C0083 heavy chain

EVQLQESGGGLVQPGGSLRLSCAASGFTFSIYSMNWVRQAPGKGLEWVSSI
GSSGGTTYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAGSQYLYGMDV
WGQGTTTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGA
LTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSC
DKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW
YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK
TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNY
KTTTPVLDS DGSFFLYSKLTVDKSRWQQGNV FSCSVMHEALHNHYTQKSLSLSPG
(SEQ ID NO:40)

C0090 VH- L5Q W97Y/ VL -F49Y A51G M30L W93F P80S:

- C0090 light chain

DIQMTQSPSSLSASVGDRVTITCRSSQRILTYLNWYQQKPGKAPKLLIYVGS
HSGVPSRFRGSGSETDFTLTISGLQSEDSATYYCQQSFFFTPLTFGGGTKVEIKRTVAA
PSVFIFPPSDEQLKSGTASVVCLLNFPYPREAKVQWKVDNALQSGNSQESVTEQDSK
DSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC (SEQ ID NO:41)

- C0090 heavy chain

EVQLQESGGGLVQPGGSLRLSCAASGFTFSIYSMNWVRQAPGKGLEWVSSI
GSSGGTTYADSVKGRFTISRDN SKNTLYLQMNSLRAEDTAVYYCAGSQYLYGMDV
WGQGTTTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGA
LTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSC
DKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNW
YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK
TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNY
KTTTPVLDS DGSFFLYSKLTVDKSRWQQGNV FSCSVMHEALHNHYTQKSLSLSPG
(SEQ ID NO:42)

- C0108 heavy chain

EVQLQESGGGLVQPGGSLRLSCAASGFTFSIYSMNWVRQAPGKGLEWVSSI
GSSGGTTYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAGSQYLYGMDV
WGQGTTTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGA
LTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSC
DKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVQFNW
YVDGVEVHNAKTKPREEQFNSTFRVSVLTTVVHQDWLNGKEYKCKVSNKALPAPEE
KTISKTKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN
YKTTTPMLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG
(SEQ ID NO:44)

- C0109 heavy chain

EVQLQESGGGLVQPGGSLRLSCAASGFTFSIYSMNWVRQAPGKGLEWVSSI
GSSGGTTYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYYCAGSQYLYGMDV
WGQGTTTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGA
LTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSC
DKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVQFNW
YVDGVEVHNAKTKPREEQFNSTFRVSVLTTVVHQDWLNGKEYKCKVSNKALPAPEE
KTISKTKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN
YKTTTPMLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG
(SEQ ID NO:45)

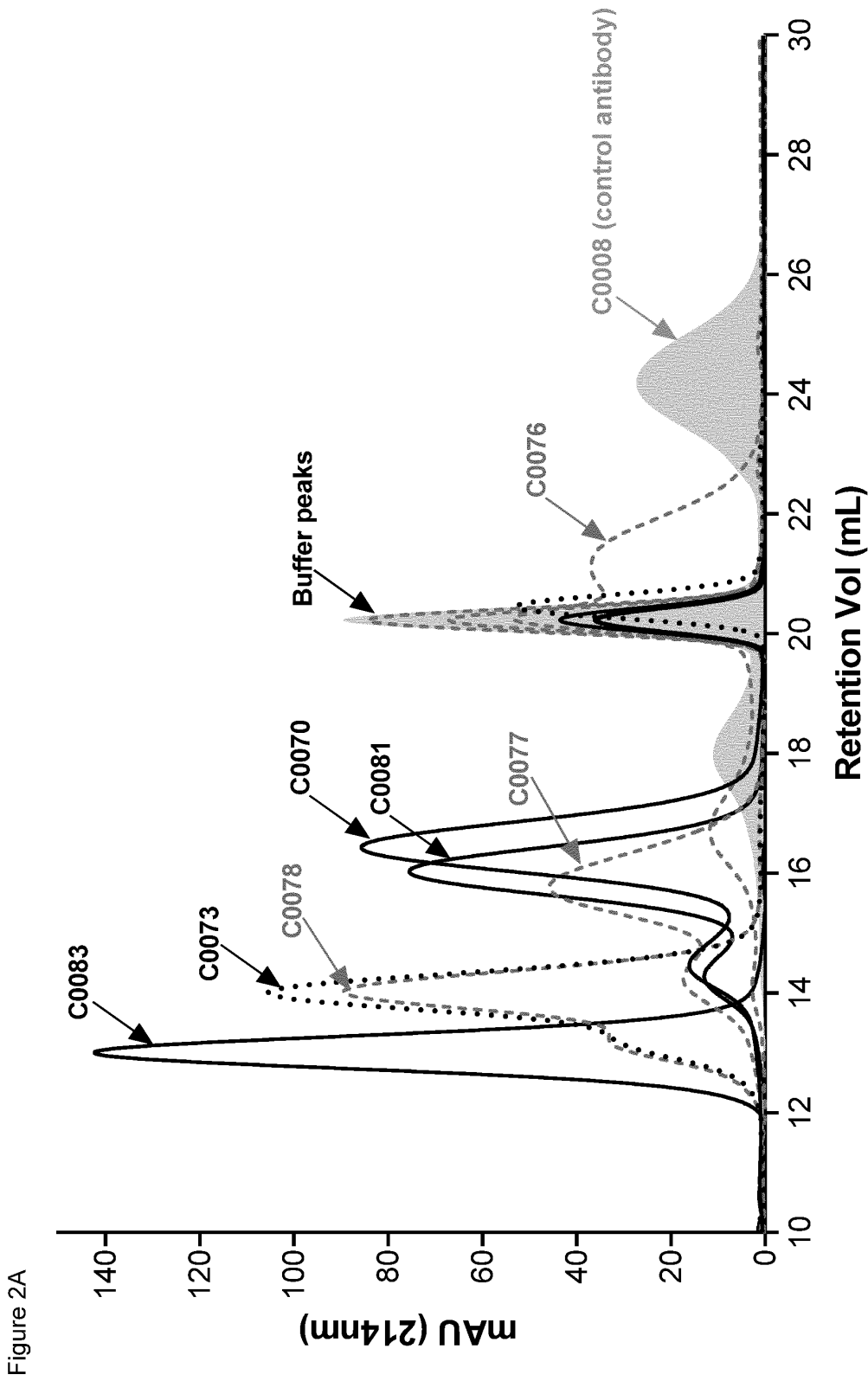


Figure 2B

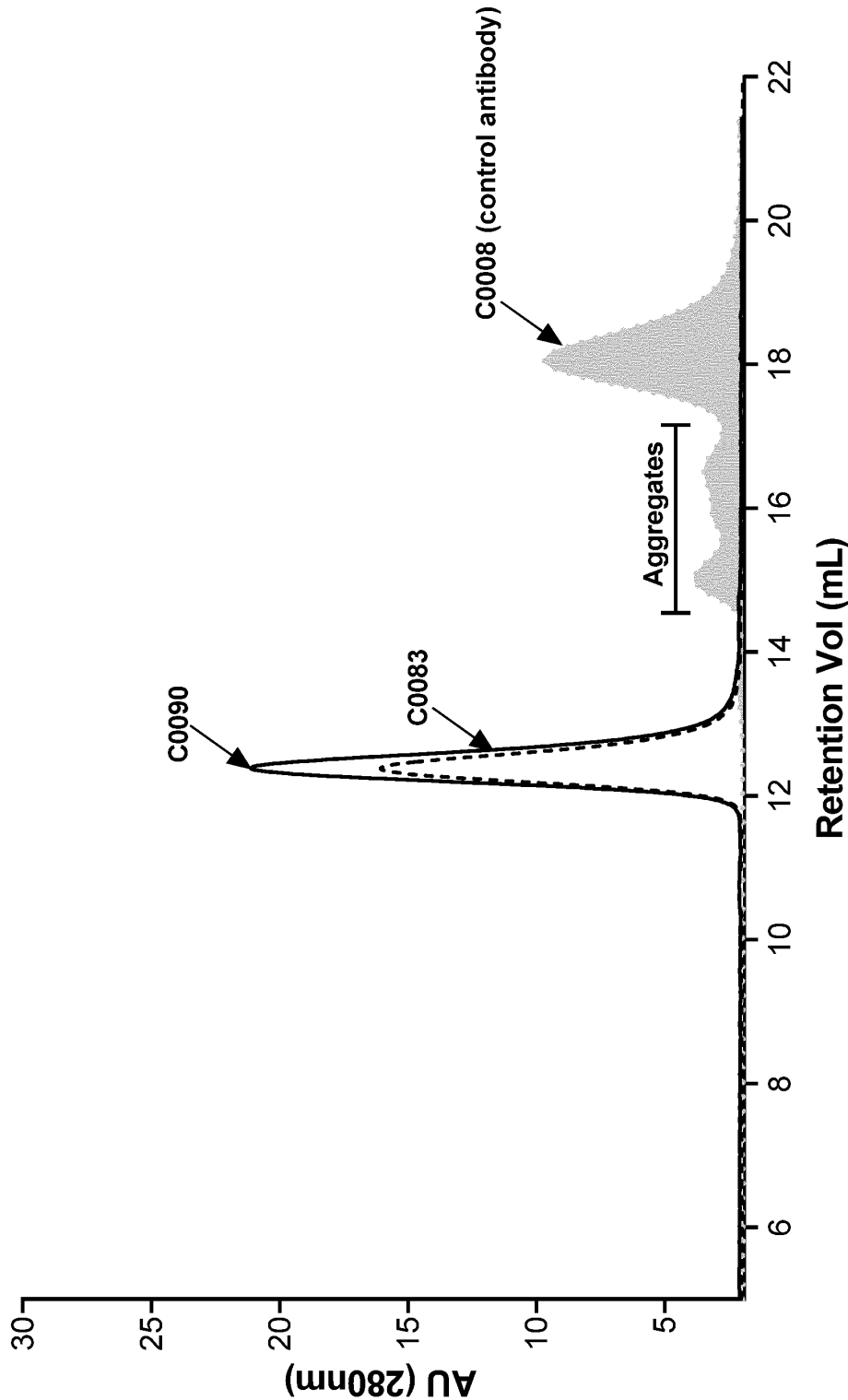
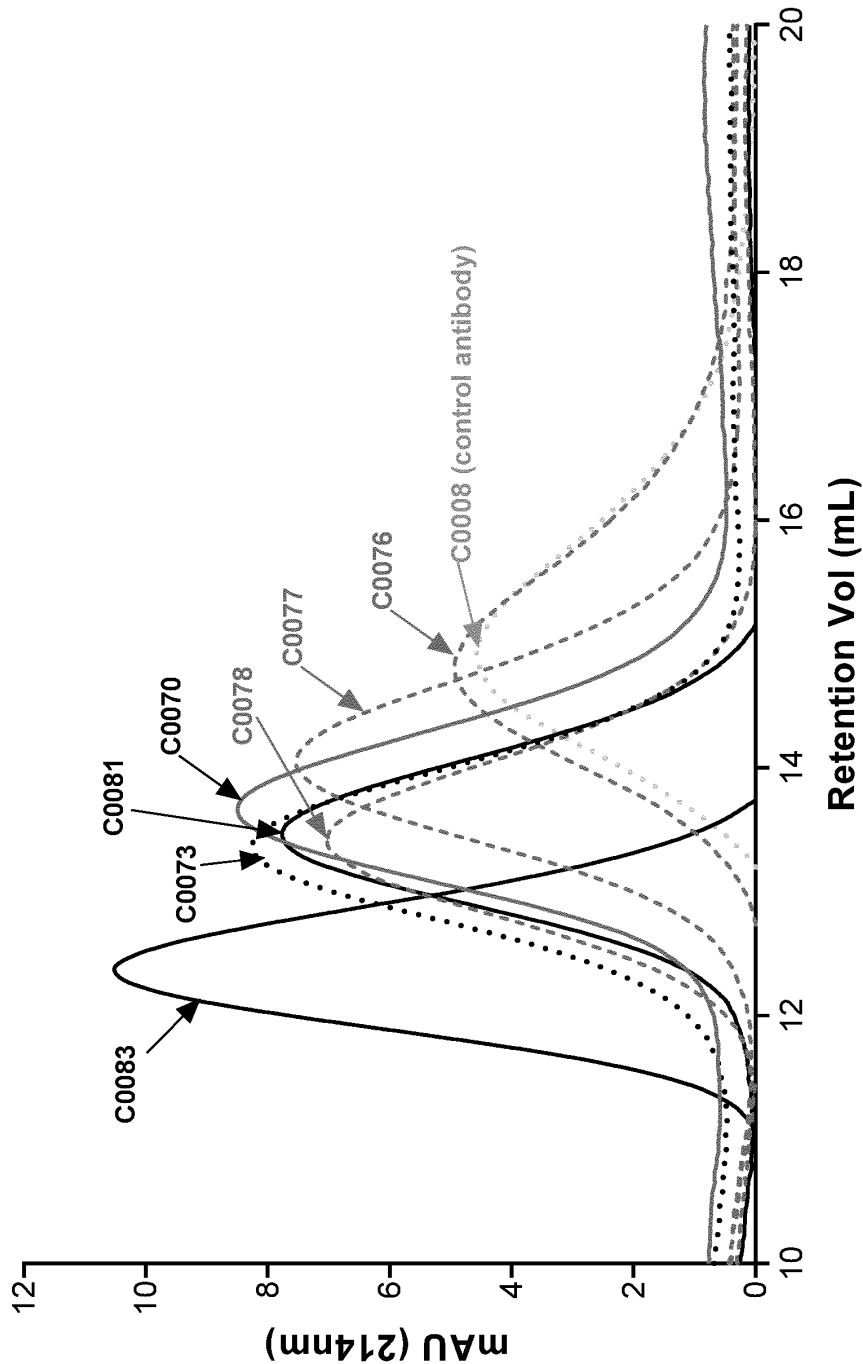


Figure 2C



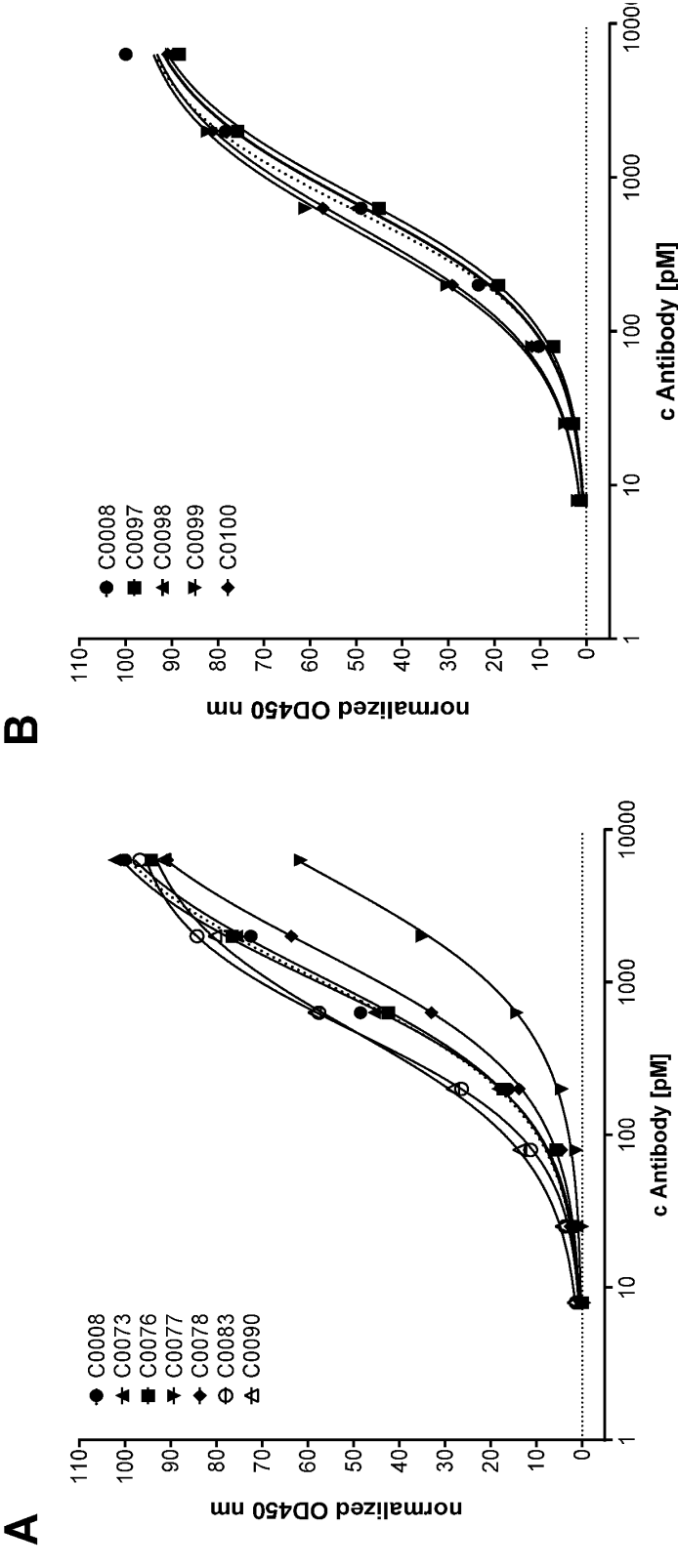


Figure 3

10/24

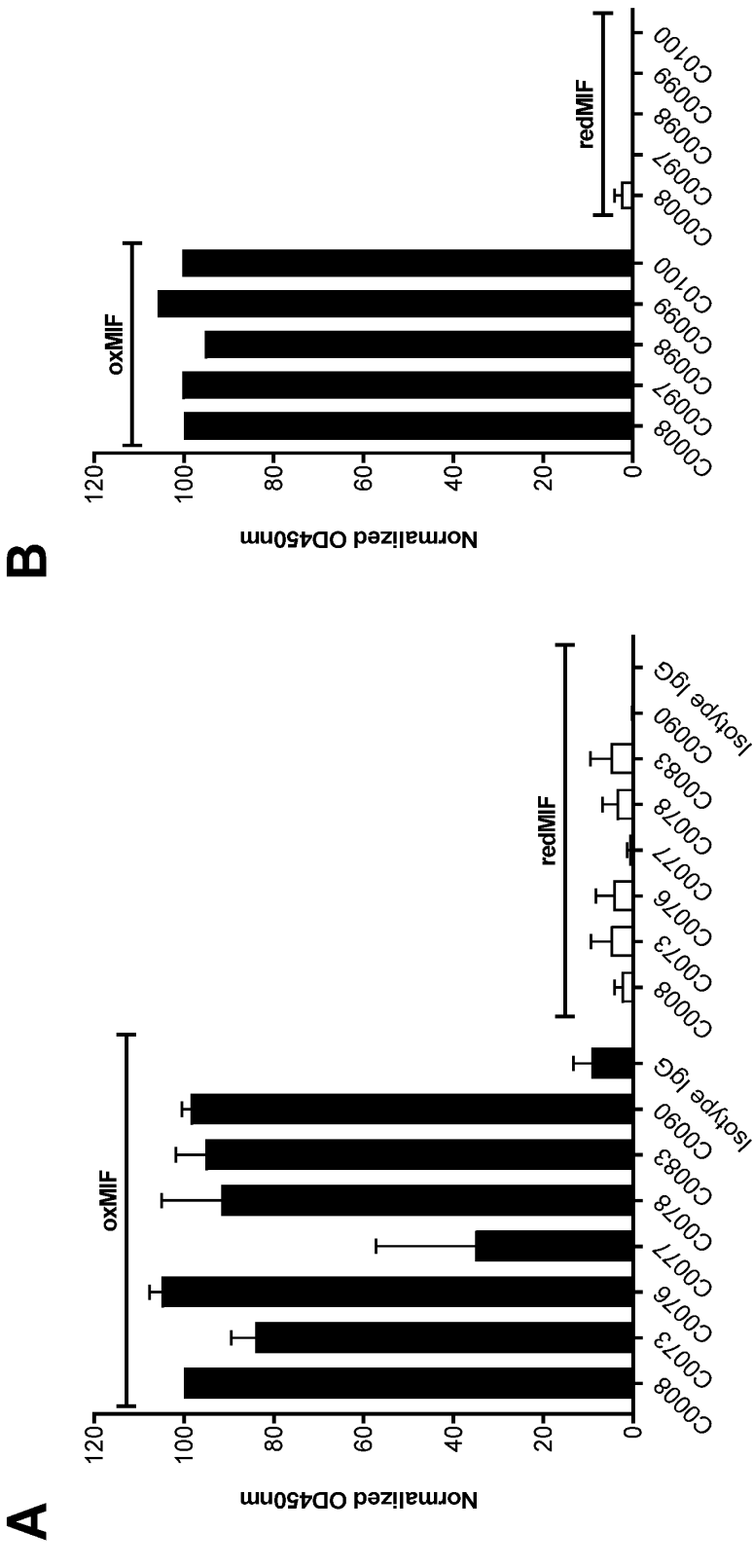
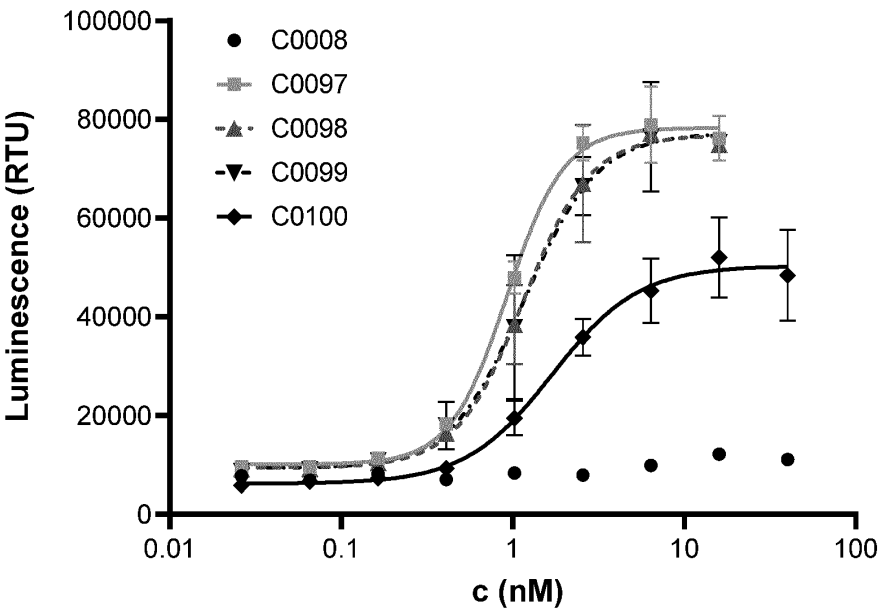


Figure 4

Figure 5



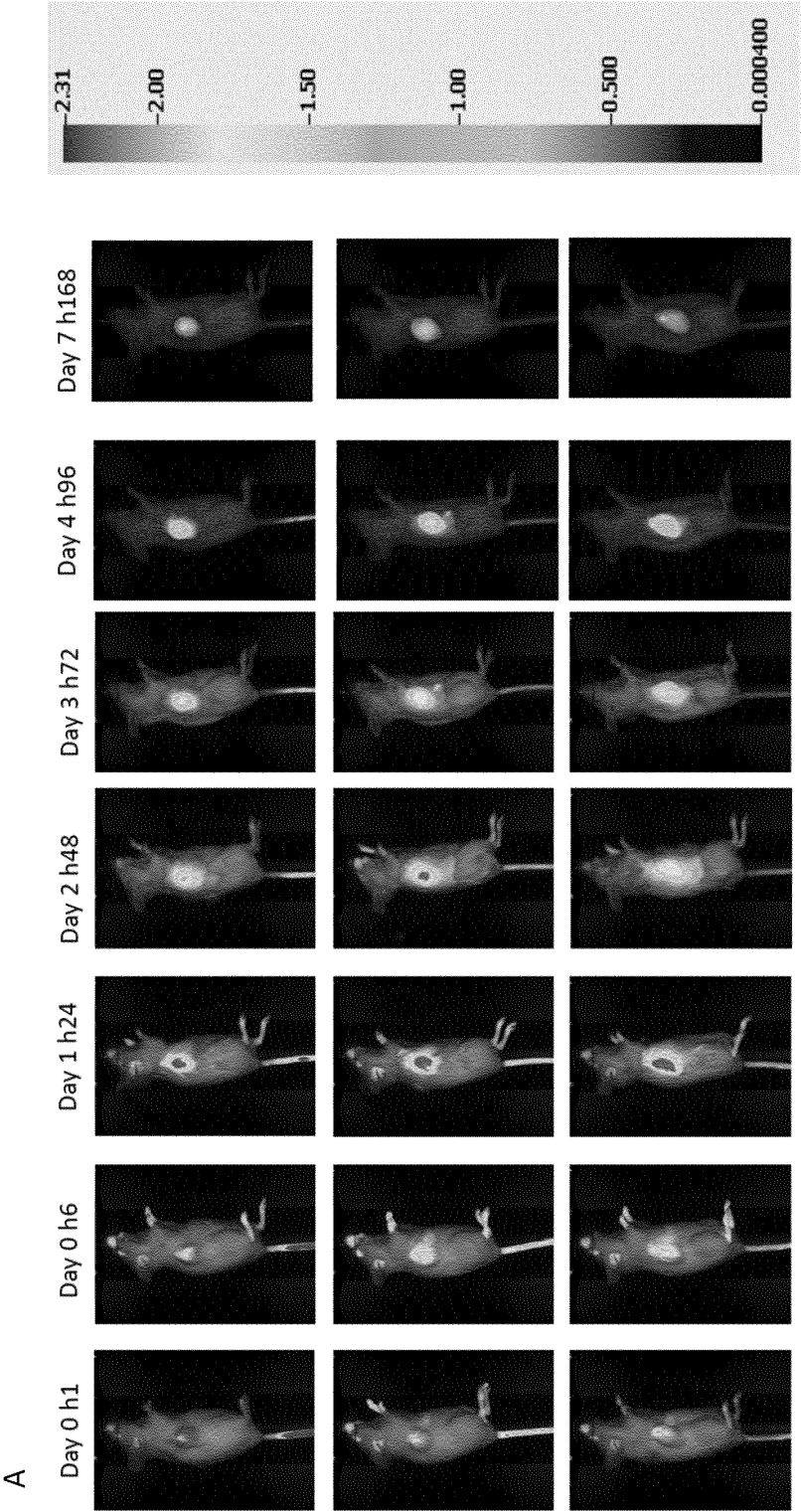


Figure 6

Figure 6 (contd.)

B

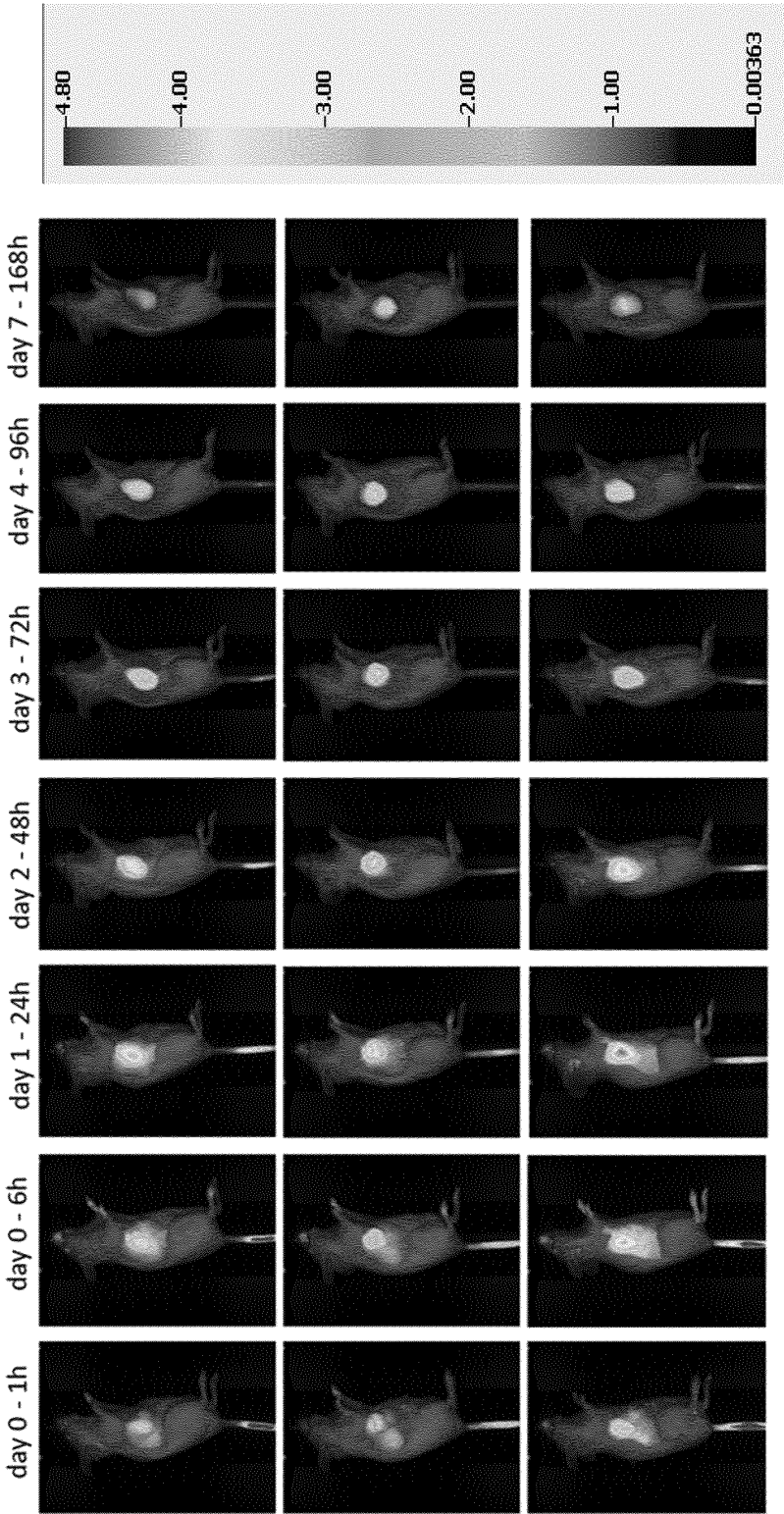


Figure 6 (contd.)

C

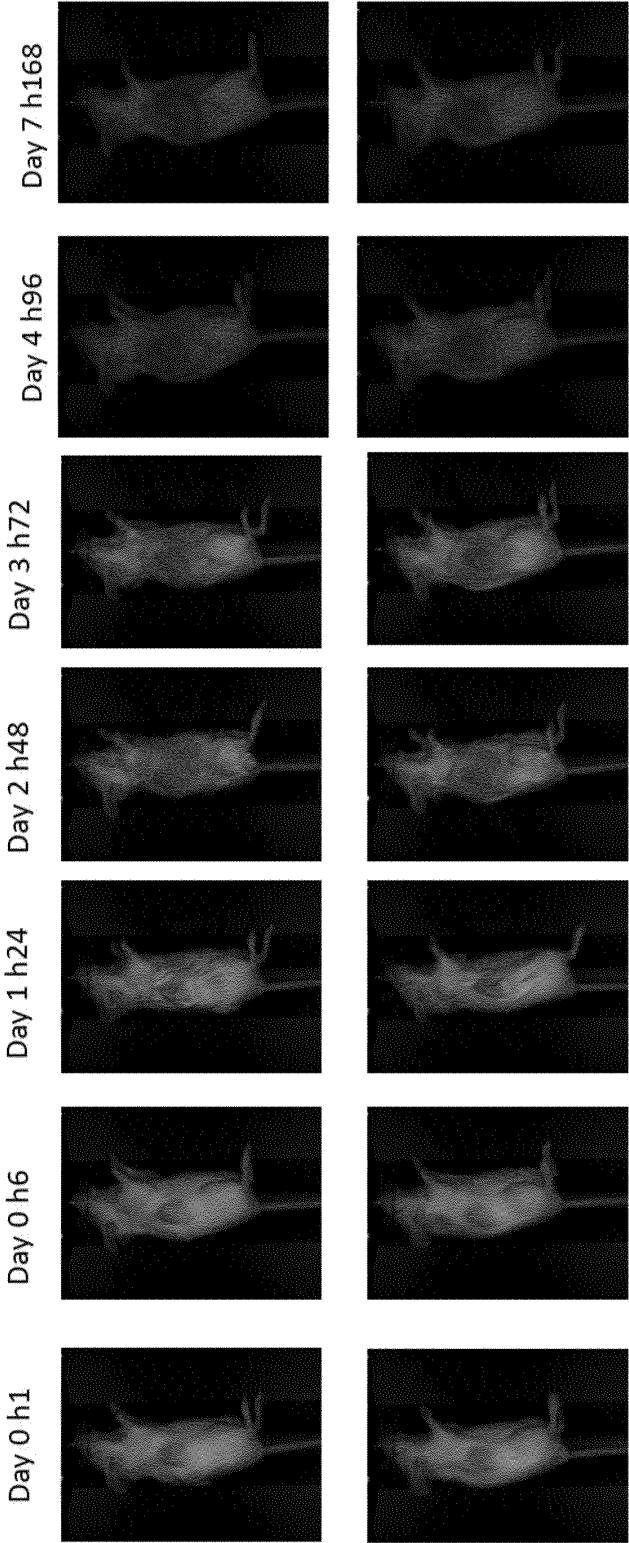


Figure 6 (contd.)
D

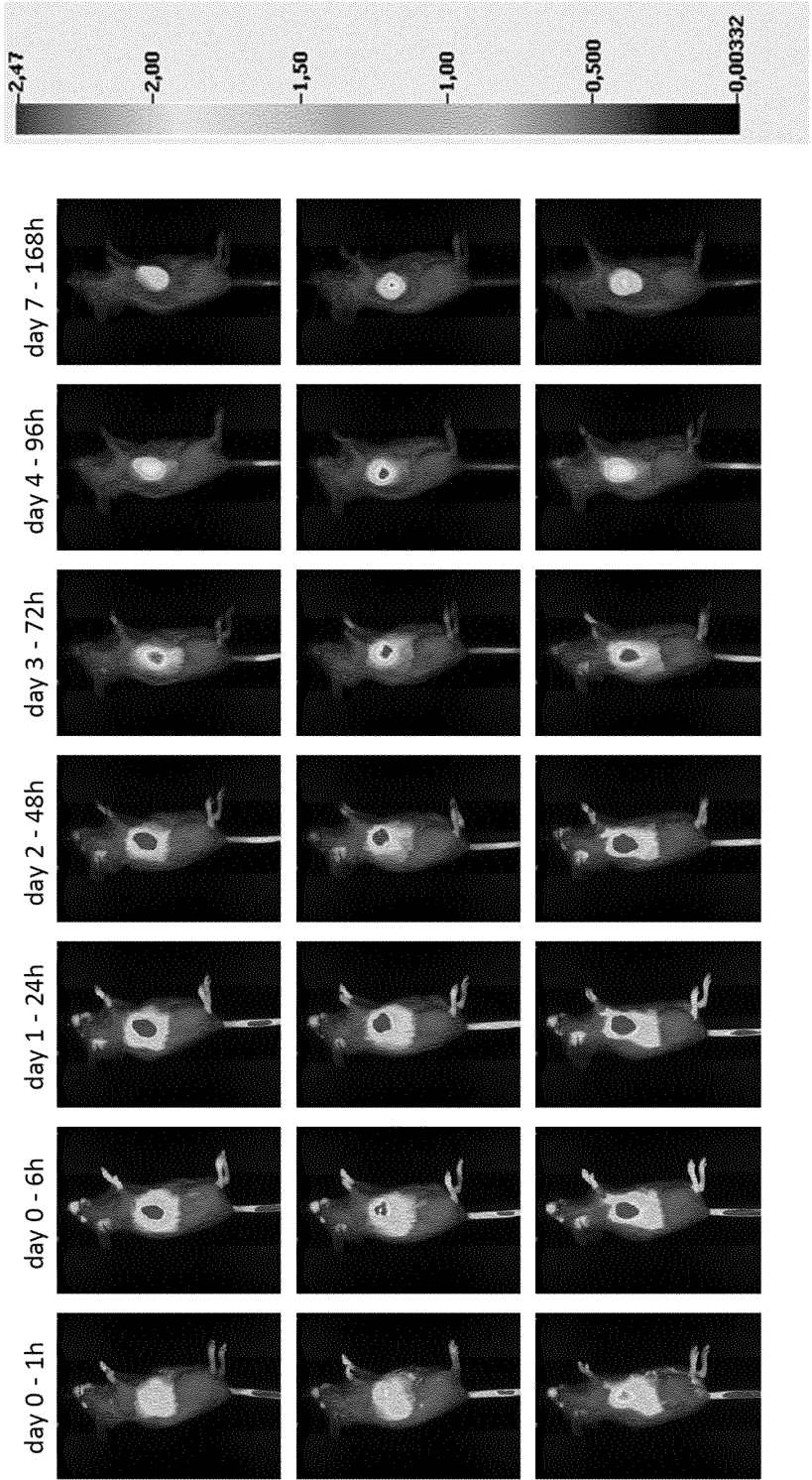


Figure 6 (contd.)

E

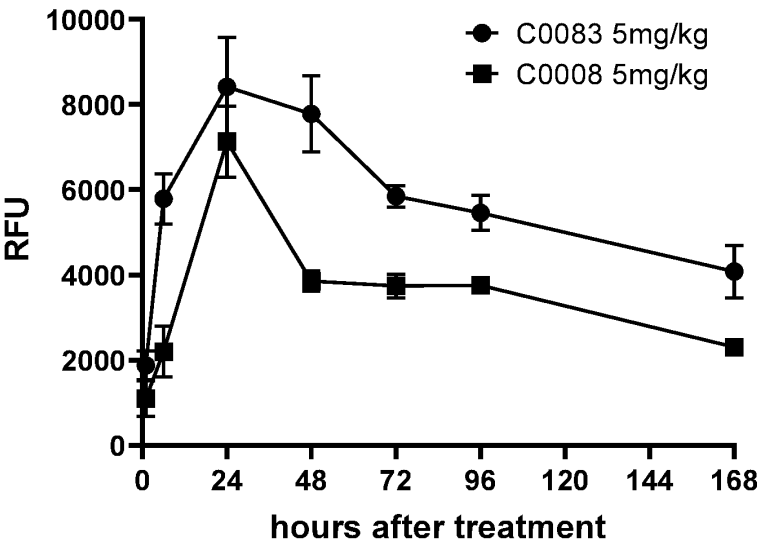


Figure 7

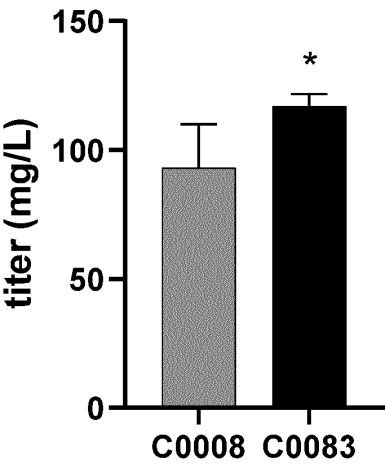


Figure 8

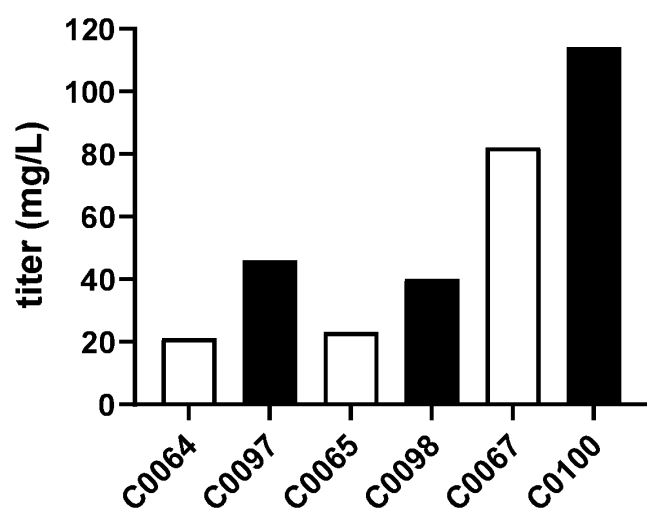
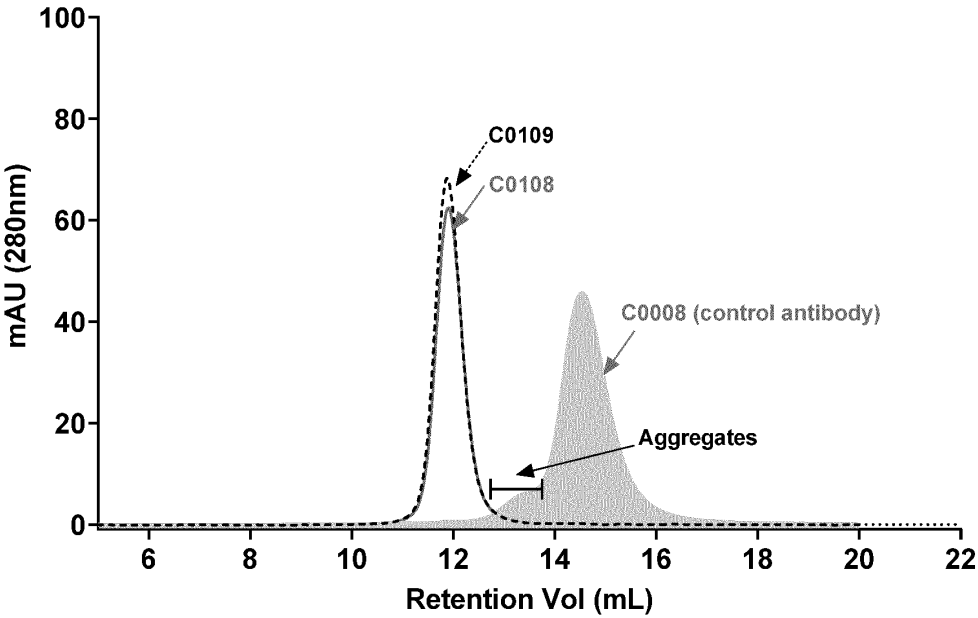


Figure 9

A



B

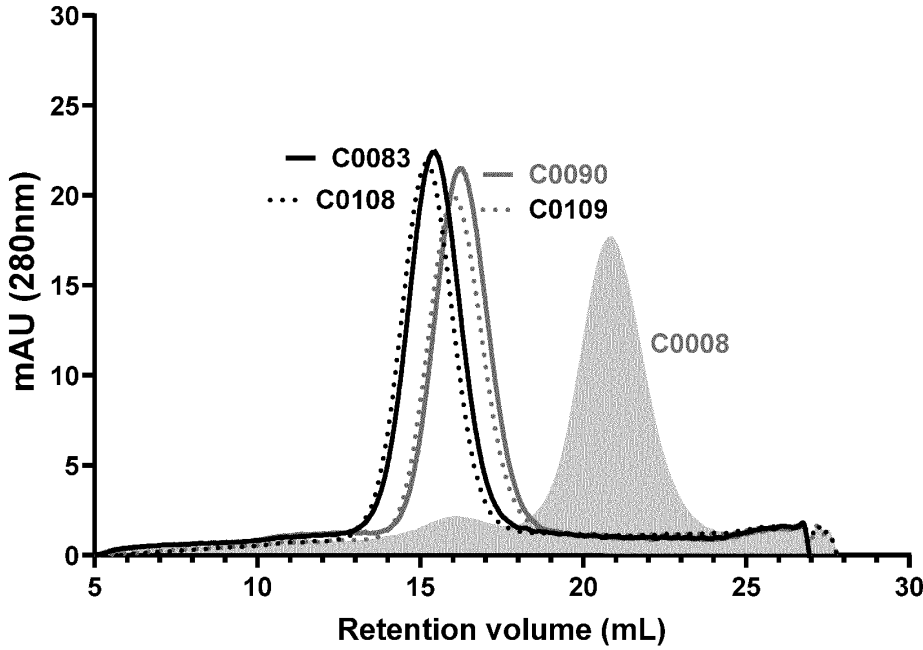


Figure 10

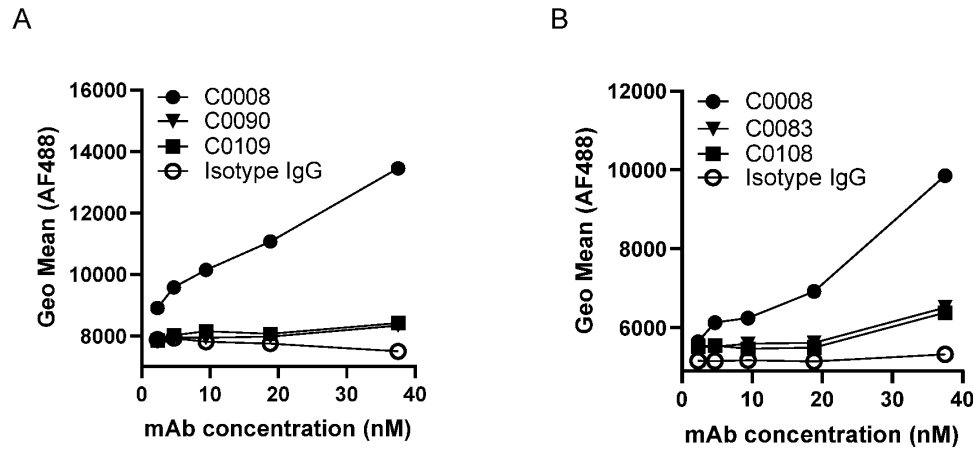


Figure 11

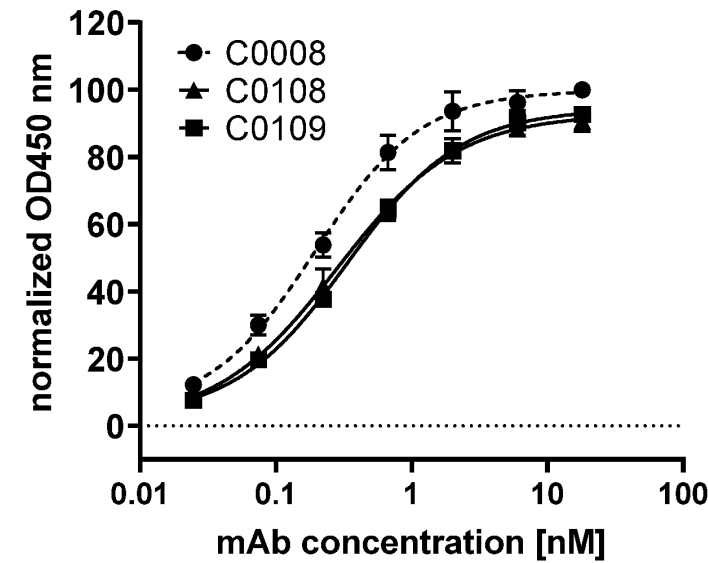


Figure 12

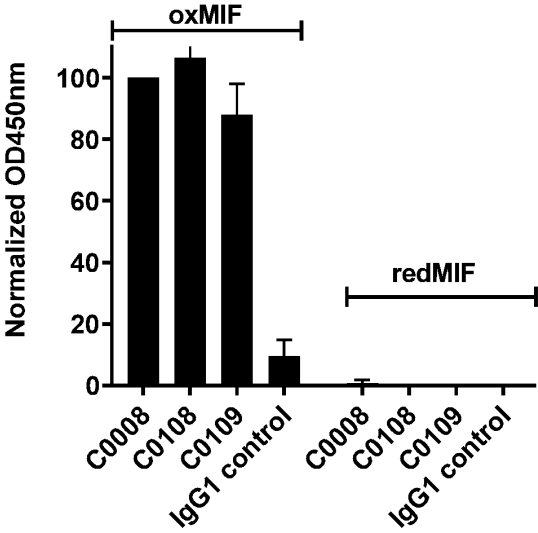


Figure 13

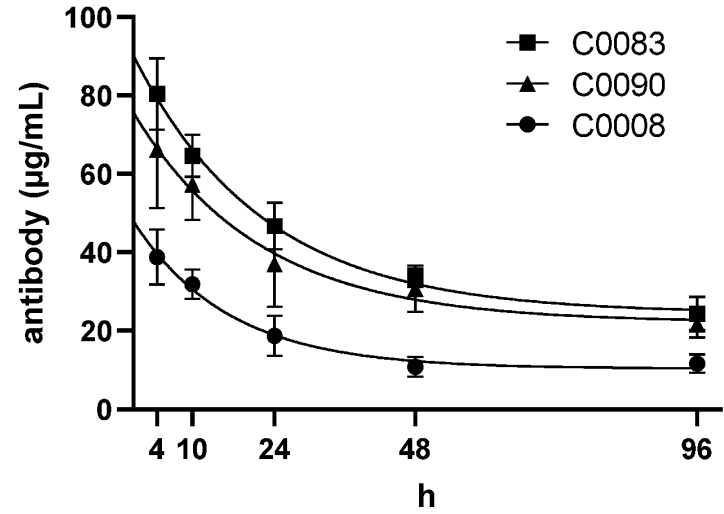
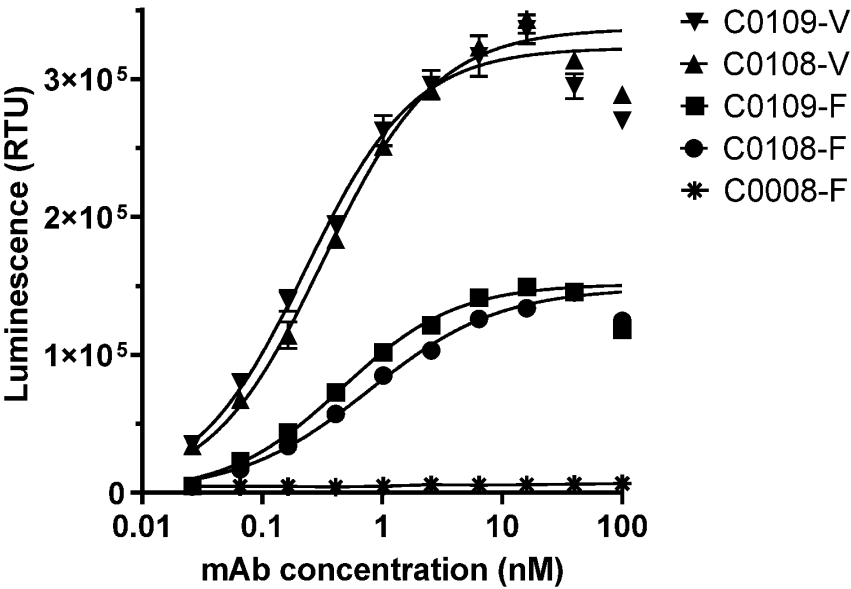


Figure 14

A



B

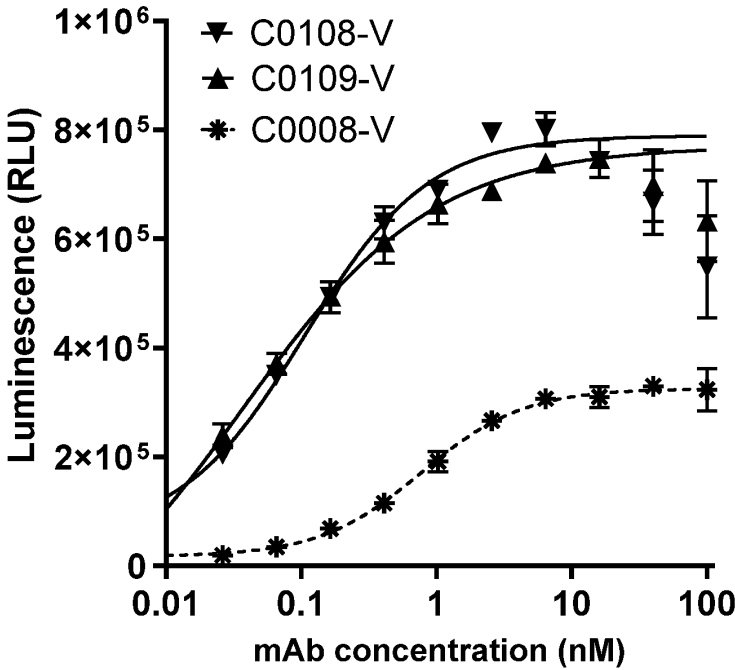


Figure 14 (contd.)

C

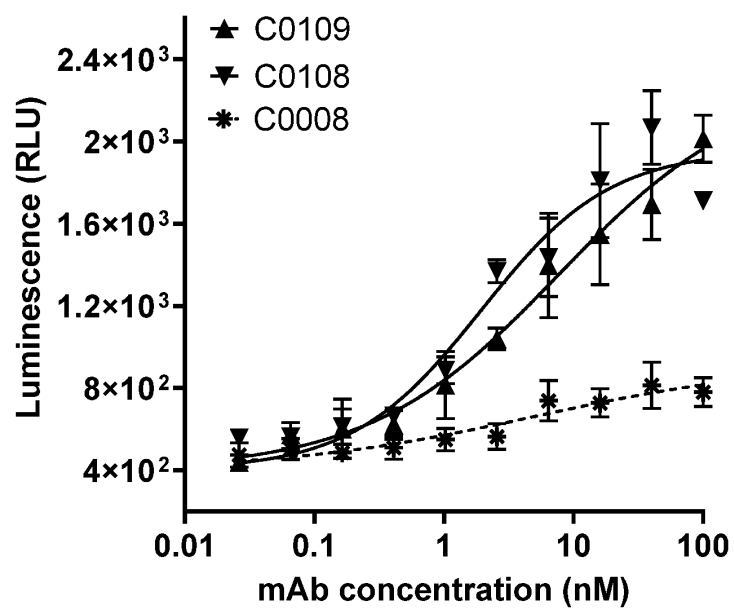
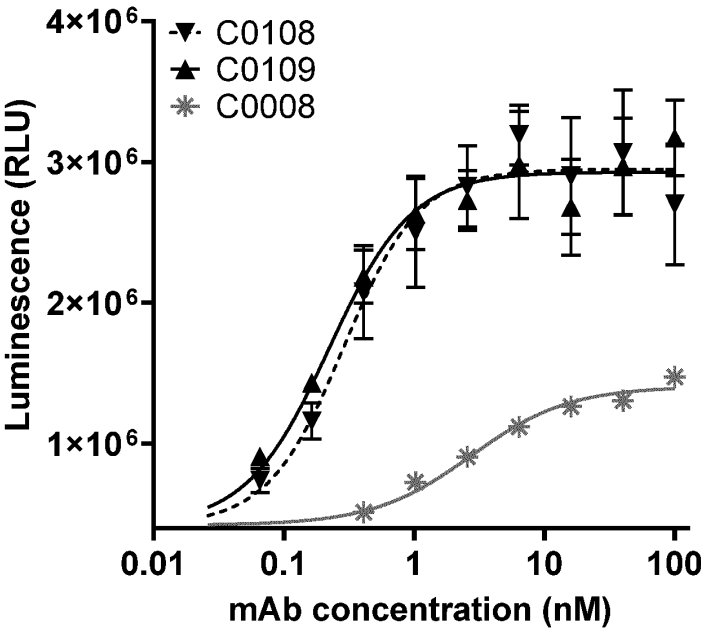


Figure 15

A



B

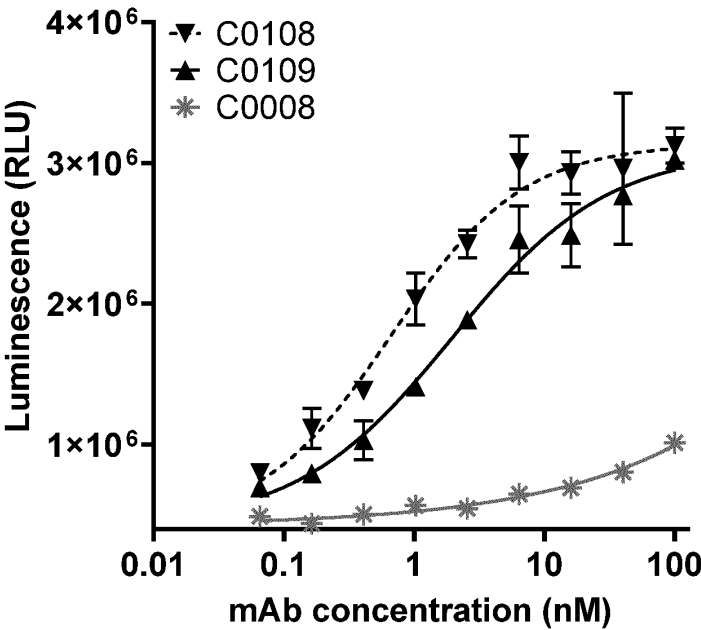
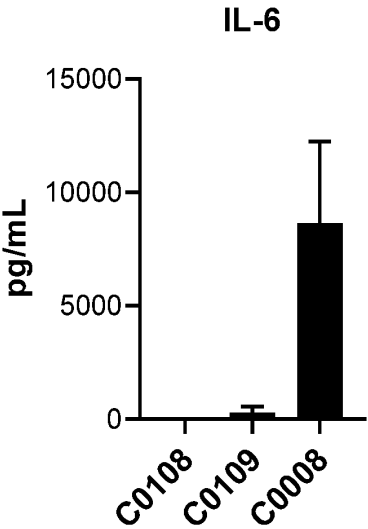


Figure 16

A



B

