

Figure 1

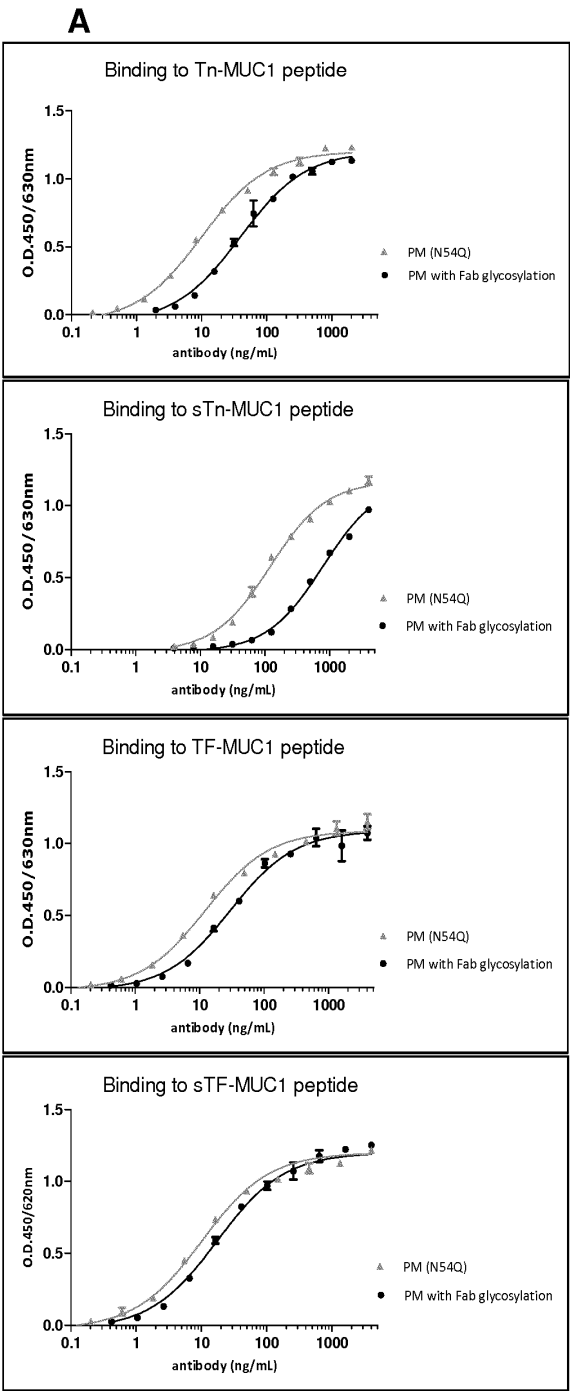


Figure 1 - continued

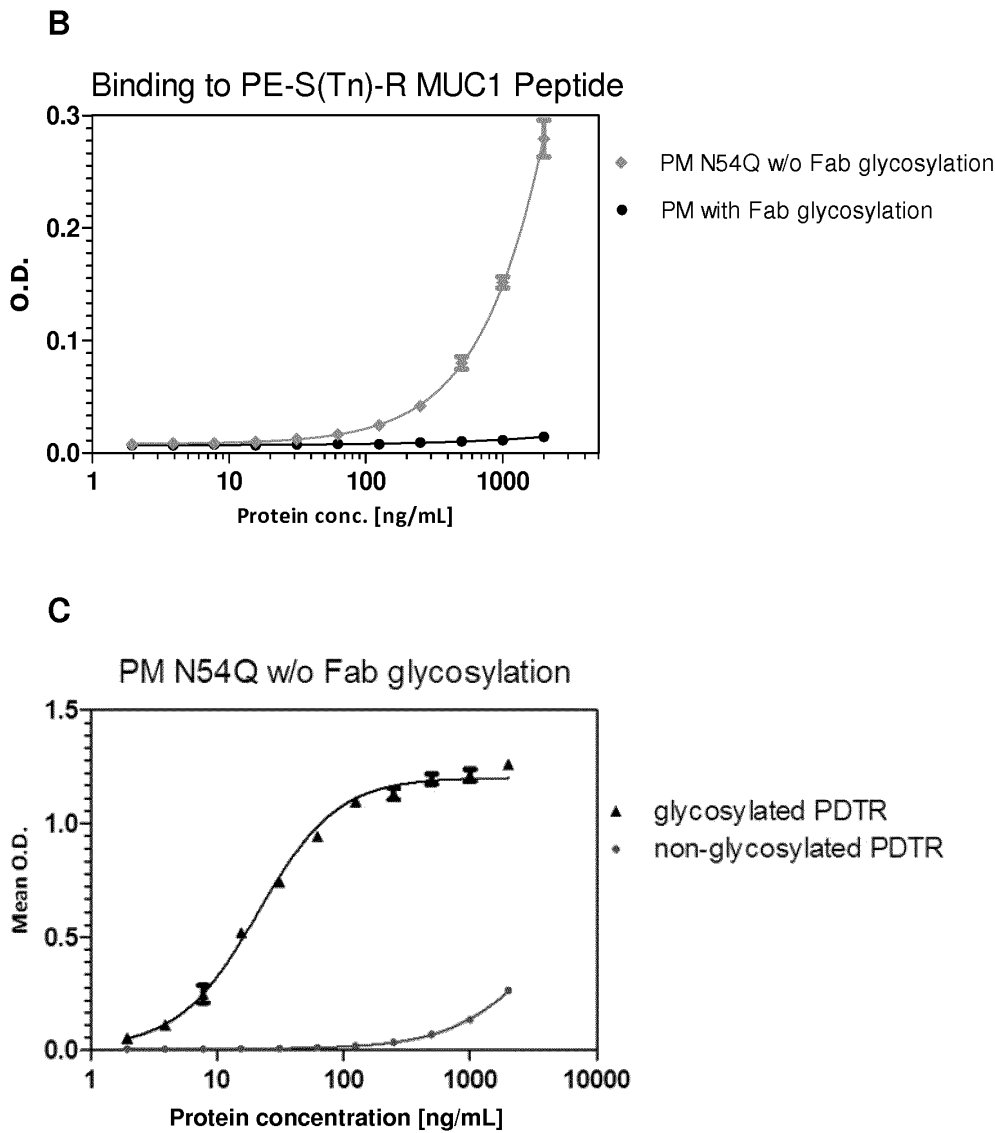


Figure 1 - continued

D

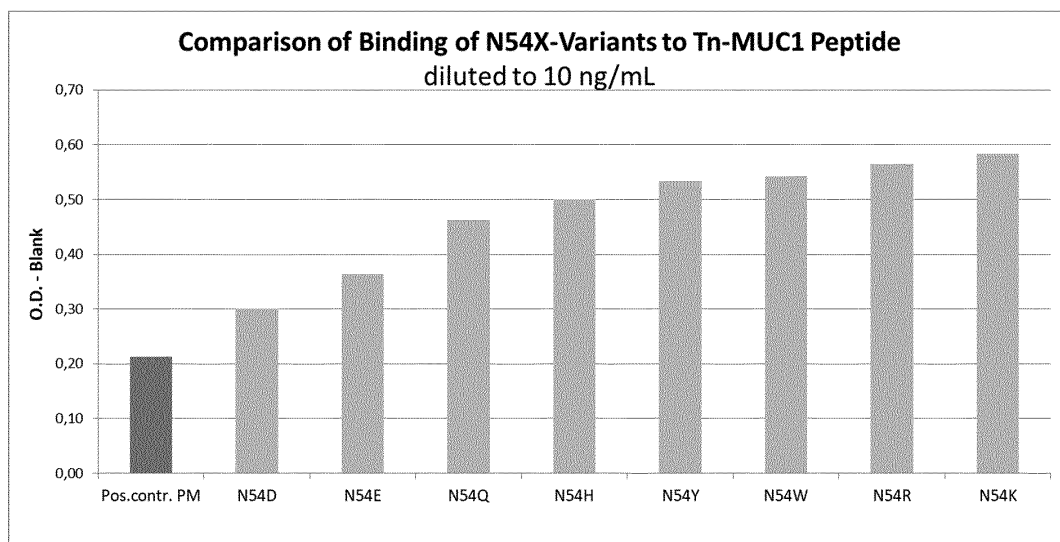


Figure 1 - continued

E

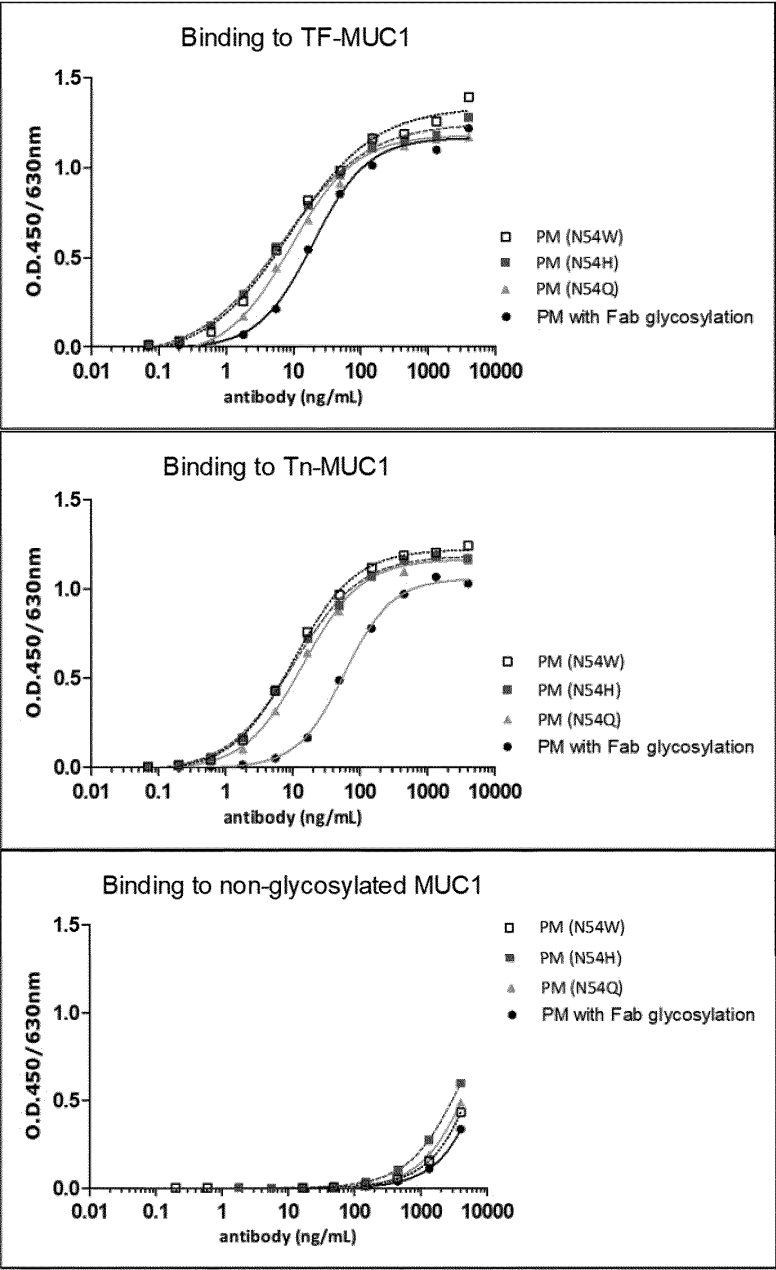


Figure 1 - continued

F

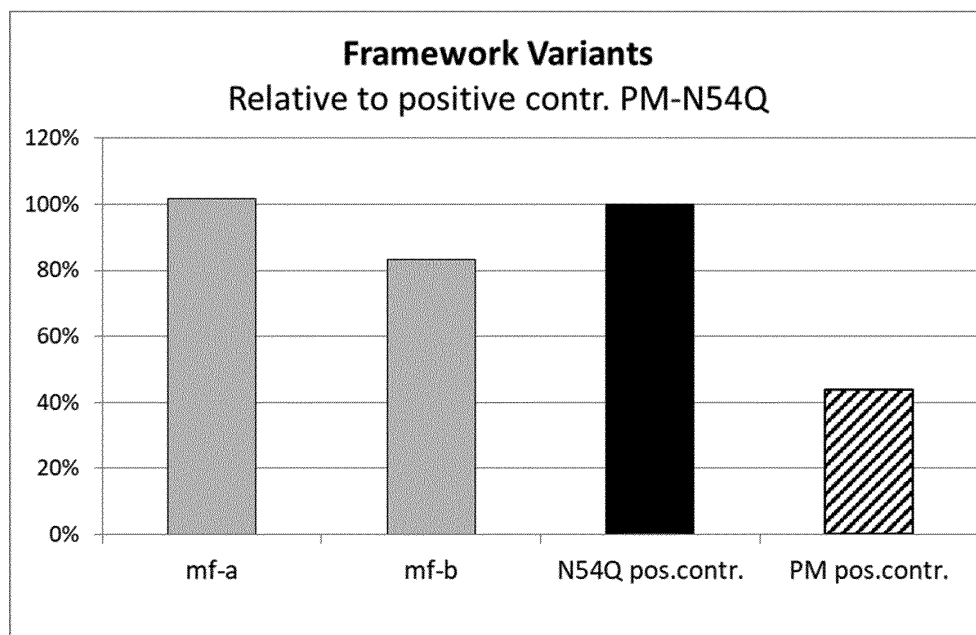


Figure 2

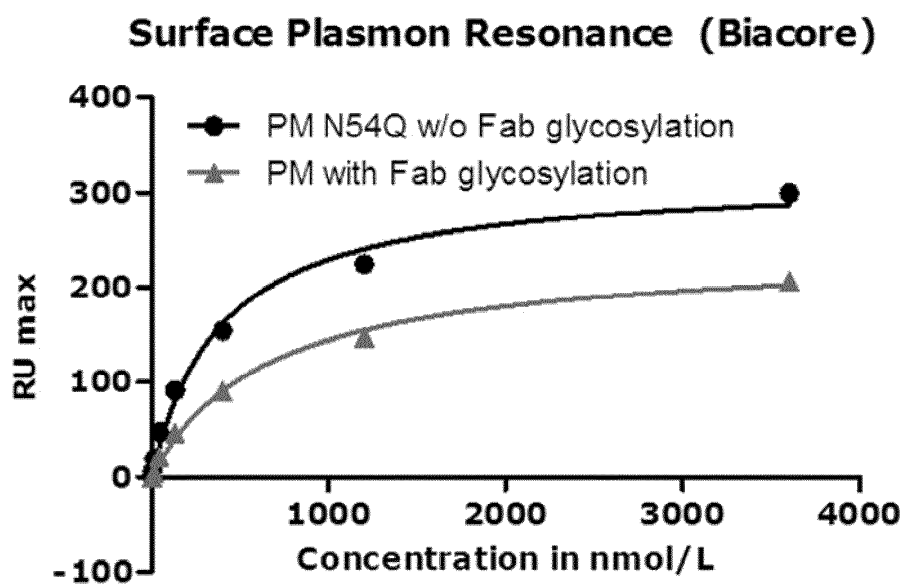


Figure 3

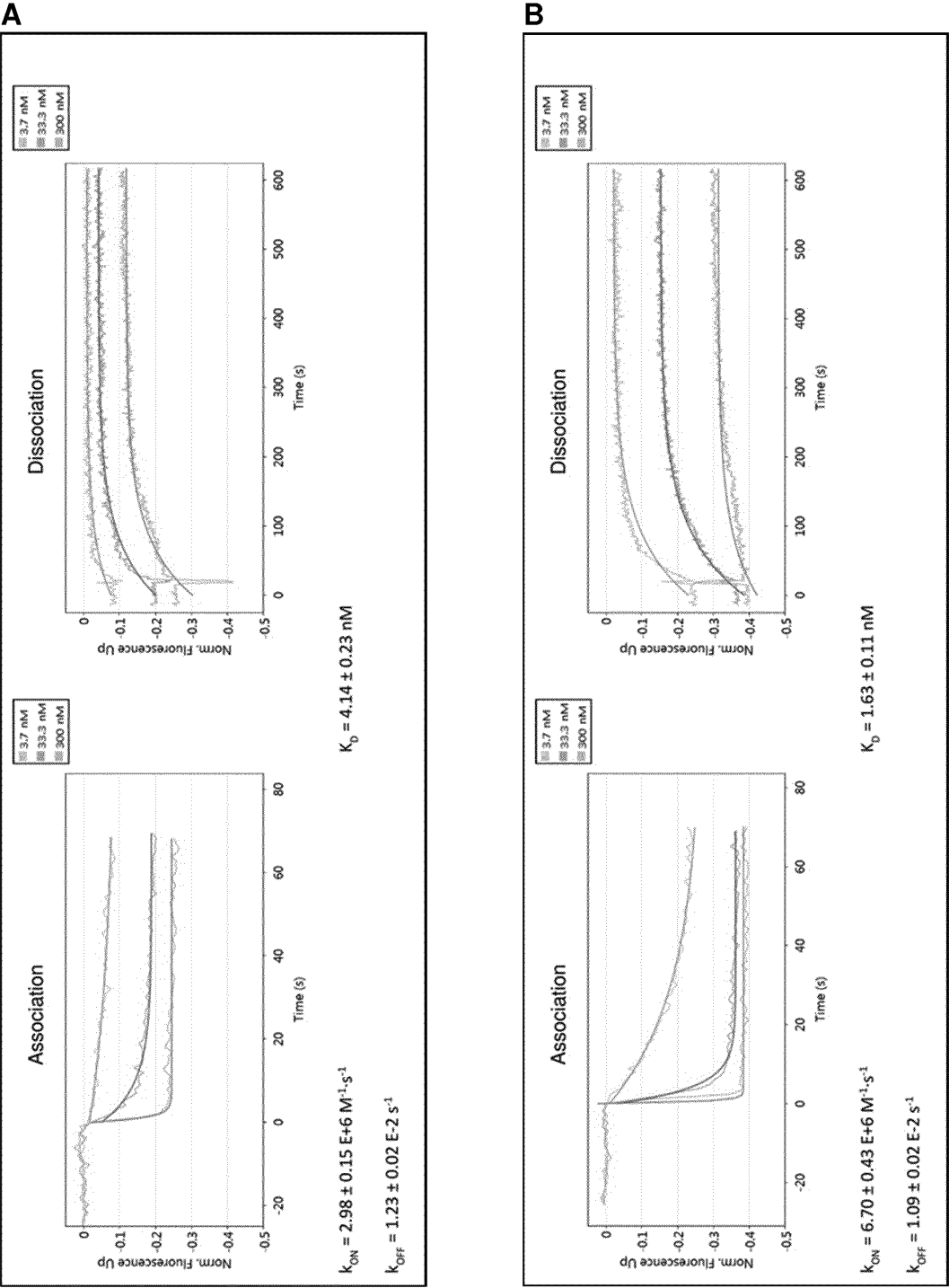


Figure 4

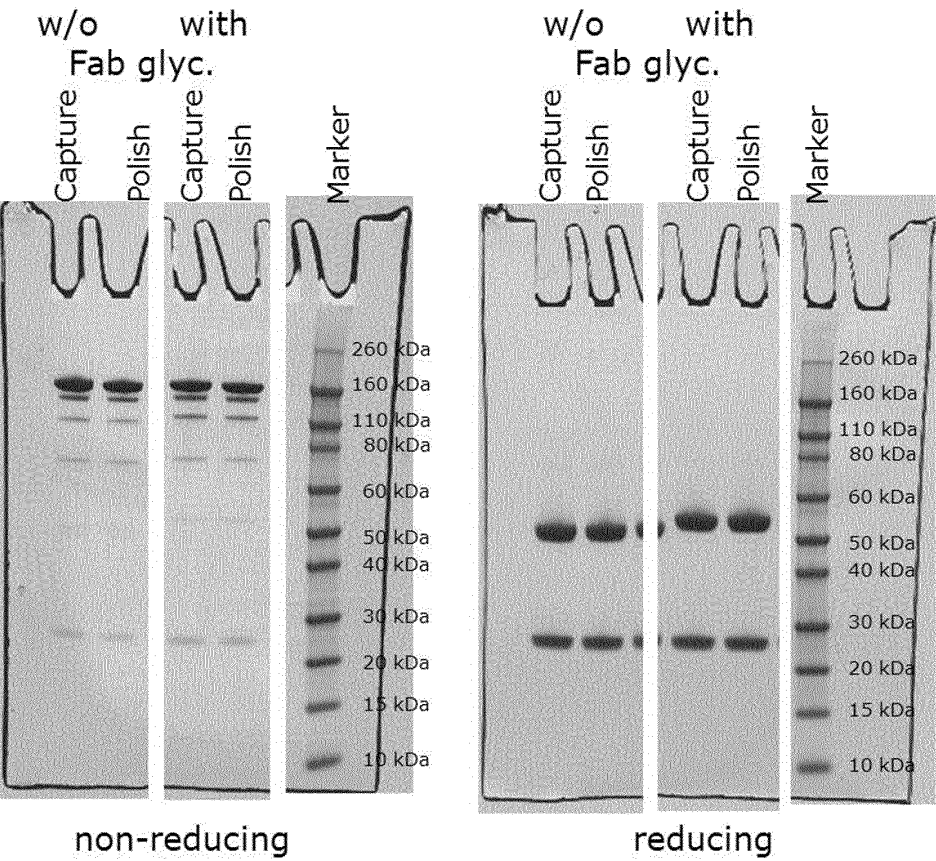


Figure 5

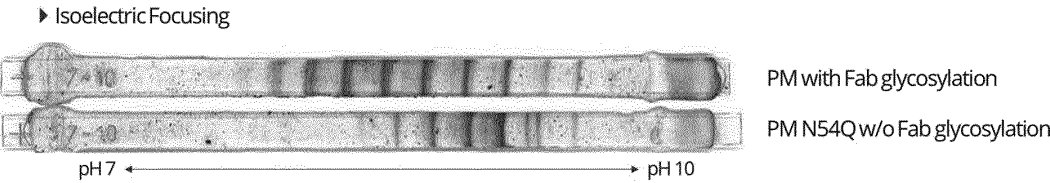


Figure 6

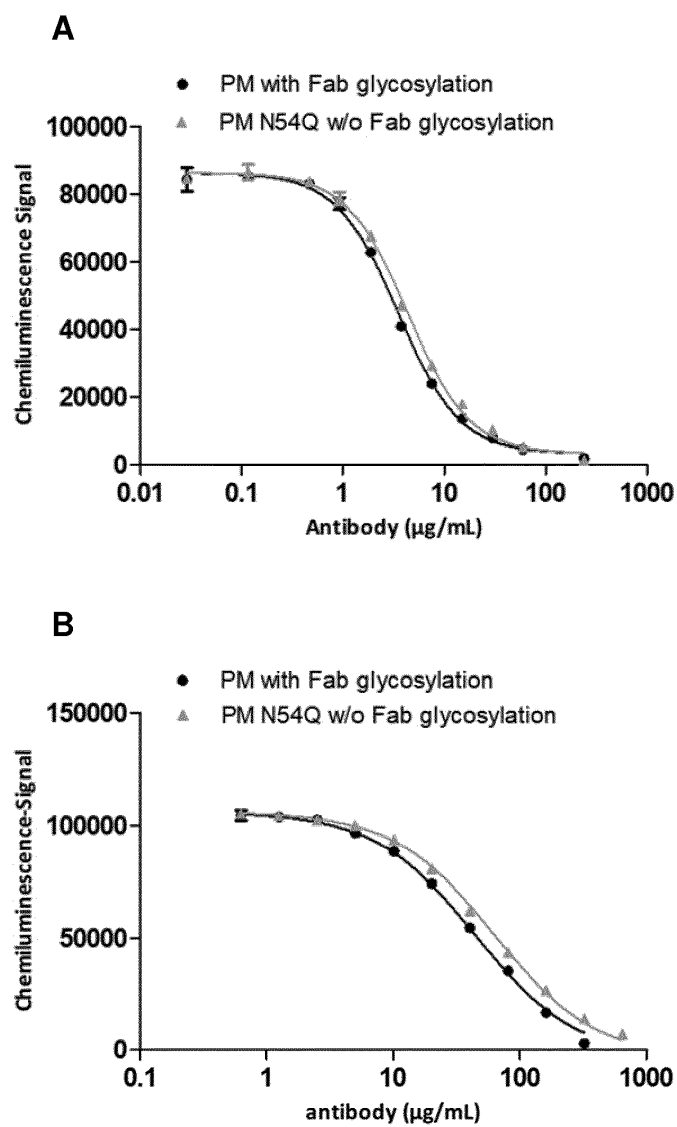
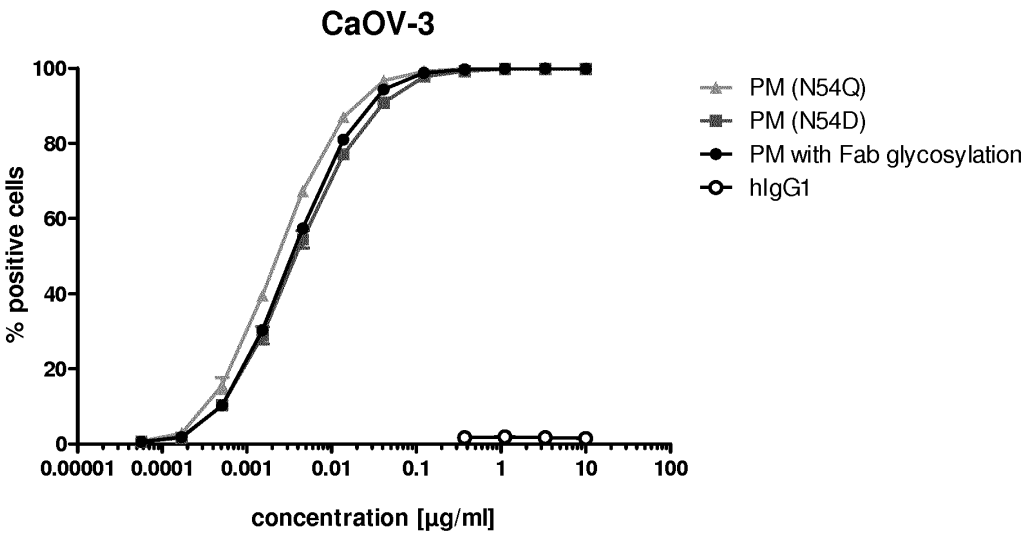


Figure 7

A



B

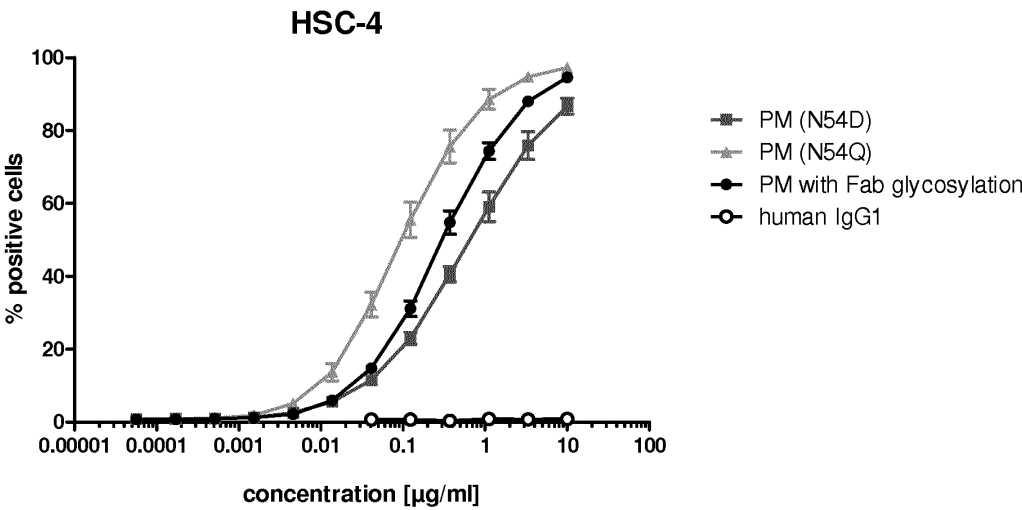


Figure 8

The amino acid sequence of the heavy chain of the humanized antibody N54Q (SEQ ID No: 22)

EVQLVESGGGLVQPGGSMRLSCVASGFPPFSNYWMNWVRQAPGKGLEWVGEIRLKSNNYTTTHY
AESVKGRFTISRDDSKNSLYLQMNSLKTEDTAVYYCTRHYFFDYWGQGTLLTVSSASTKGPS
VFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSV
TVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPK
DTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLH
QDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGF
YPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEGLHN
HYTQKSLSLSPGK

variable region: aa 1-117, constant region: aa 118-447

Figure 9

The amino acid sequence of the light chain of the humanized antibodies N54Q and PankoMab (SEQ ID No: 16)

DIVMTQSPLSNPVTGPGEPAISCRSSKSLHNSNGITYFFWYLQKPGQSPQLLIYQMSNLA
SGVPDRFSGSGSGTDFTLRI SRVEAEDVGVYYCAQNLELPPTFGQGTKVEIKRTVAAPS
VFIFPSDEQLKSGTASVVCLLNNFYPRKAVQWVKVDNALQSGNSQESVTEQDSK
STYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

variable region: aa 1-113, constant region: aa 114-219

Figure 10

The amino acid sequence of the heavy chain of the humanized antibody PankoMab (SEQ ID No: 19)

EVQLVESGGGLVQPGGSMRLSCVASGFPPFSNYWMNWVRQAPGKGLEWVGEIRLKSNNYTTTHY
AESVKGRFTISRDDSKNSLYLQMNSLKTEDTAVYYCTRHYFFDYWGQGTLLTVSSASTKGPS
VFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSV
TVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPK
DTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLH
QDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGF
YPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCSCVMHEGLHN
HYTQKSLSLSPGK

variable region: aa 1-117, constant region: aa 118-447

Figure 11

The amino acid sequence of the heavy chain of chimeric antibody PM N54Q (SEQ ID No: 23)

MKHLWFFLLLVAAAPRWLSEVQLVESGGGLVQPGGSMRLSCVASGFPFSNYWMNWVRQAPGK
GLEWVGEIRLKSQYTHYAESVKGRFTISRDDSKNSLYLQMNSLKTEDTAVYYCTRHYFD
YWGQGTLLTVSSAKTTPPSVYPLAPGSAAQTNSMVTLGCLVKGYFPEPVTVTWNSGSLSSGV
HTFPAVLQSDLYTLSSSVTVPSSTWPSQTVTCNVAHPASSTKVDKKIVPRDCGCKPCICTVP
EVSSVFIFPPKPKDVLITITLTPKVTCTVVVDISKDDPEVQFSWFVDDVEVHTAQTTPREEQIN
STFRSVSELPIMHQDWLNGKEFKCRVNSAAFPAPIEKTISKTKGRPKAPQVYTIPPPKEQMA
KDKVSLTCMITNFFPEDITVEWQWNGQPAENYKNTQPIMDTDGSYFVYSKLVQKSNWEAGN
TFTCSVLHEGLHNHHTKSLSHSPGK

secretory signal sequence: aa 1-19, variable region: aa 20-136, constant region: aa 137-460

Figure 12

The amino acid sequence of the light chain of chimeric antibody PM N54Q (SEQ ID No: 21)

MVLQTQVFISLLLWISGAYGDIVMTQSPLSNPVTGPGEPAISCRSSKSLLSNGITYFFWYL
QKPGQSPQLLIYQMSNLAGVDPDRFSGSGSGTDFTLRISRVEAEDVGVYYCAQNLELPPTFG
QGTKVEIKRADAAPTVSIFPPSSEQLTSGGASVVCFLNNFYPKDINVKWKIDGSERQNGVLN
SWTDQDSKDSSTYSMSSTLTTLTKDEYERHNSYTCEATHKTSTSPIVKSFNRNEC

secretory signal sequence: aa 1-20, variable region: aa 21-133, constant region: aa 134-239