Fig. 1

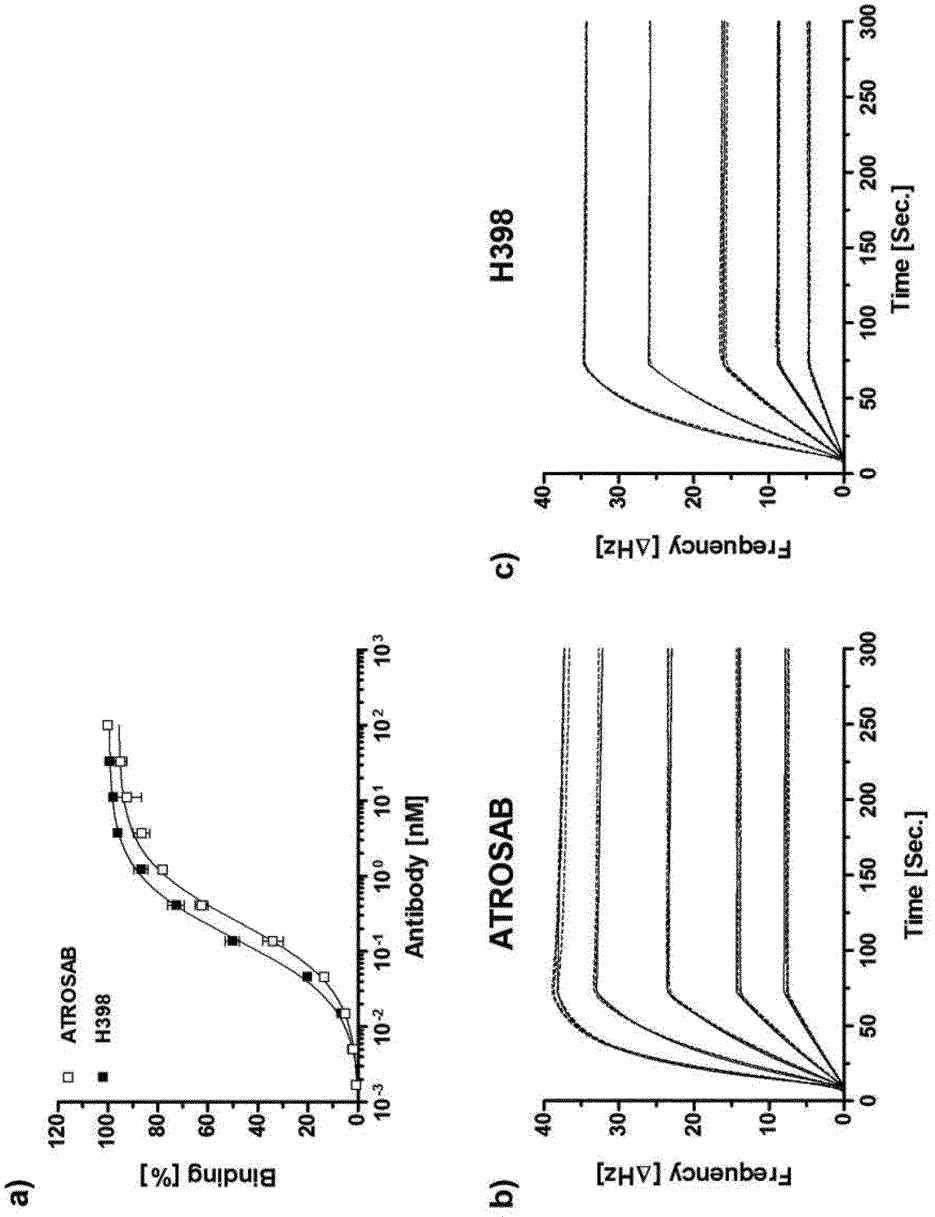
a)
Binding [%]
ATROSAB
H398
Antibody [nM]
b)
ATROSAB
Frequency [ΔHz]
Time [Sec.]
c)
H398
Frequency [ΔHz]
Time [Sec.]

Fig. 2

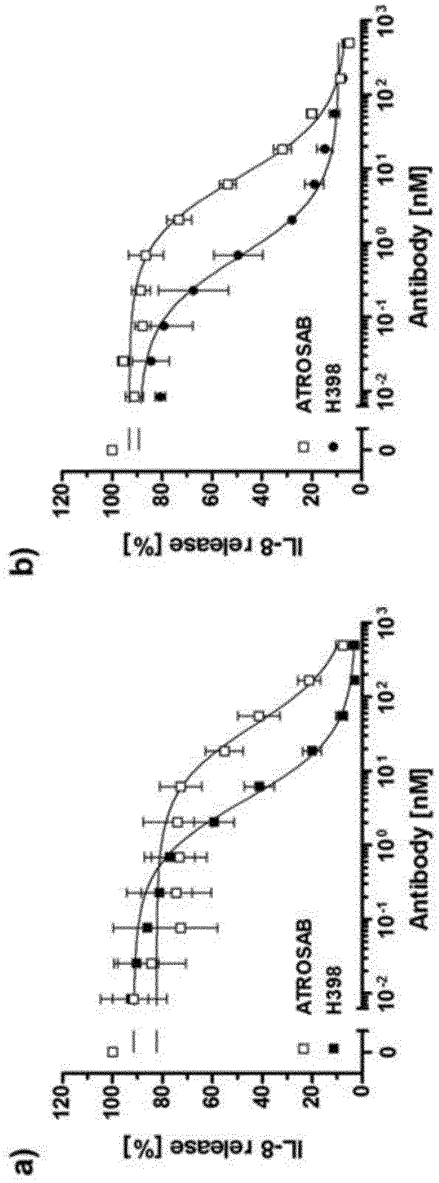
a)
b)
IL-8 release [%]
Antibody [nM]
ATROSAB
H398

Fig. 3

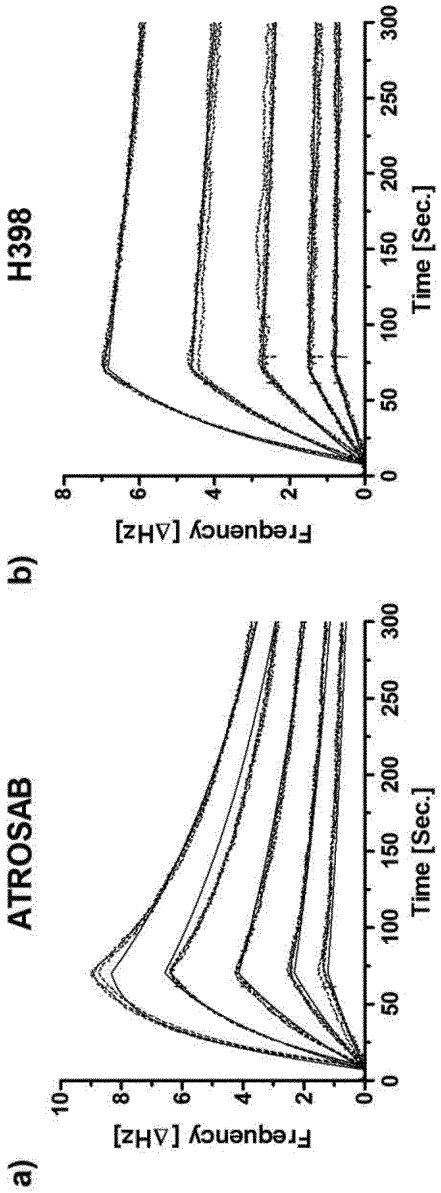
a)
b)
ATROSAB
H398
Frequency [ΔHz]
Time [Sec.]

Fig. 4

a)

```
                FR1                                CDRH1 FR2             CDRH2
Kabat           1234567891023456789202345678933 02345 6789402345678950 2a3456789602345
scFvIZI06.1     QVQLVQSGAEVKKPGSSVKVSCKASGYTFT DFYIN WVRQAPGQGLEWIG EIYPYSGHAYYNEKFKA
scFvIG11        ..............................  ..... ..............  ..V.TQ.E.K..D....
scFvT12B        H.............................  ..... ..............  ..V.SQ.E.K..D....
scFvFRK13.7     H.............................  ..... ..............  ..V.SQ.E.K..D....

                FR3                                  CDRH3  FR4
Kabat           6789702345678980 2abc34567899 0234 567891 003456789110
scFvIZI06.1     RVTITADKSTSTAYMELSSLRSEDTAVYYCAR WDFLDY WGQGTTVTVSS
scFvIG11        ..............................  ...... ..........
scFvT12B        ..............................  ...... ..........
scFvFRK13.7     ..............................  ...... ..........
```

b)

```
                FR1                      CDRL1            FR2             CDRL2
Kabat           1234567891023456789202 3 4567abcde8930234 5678940234567895 0234 56
scFvIZI06.1     DIVMTQSPLSLPVTPGEPASISC RSSQSLLHSNGNTYLH WYLQKPGQSPQLLIY TVSNRFS
scFvIG11        ......................  ................ ................ .......
scFvT12B        ......................  ................ ................ .......
scFvFRK13.7     .VQ.....S..SASV.DRVT.T.  ................ ..Q....KA.K.... .......

                FR3                                  CDRL3     FR4
Kabat           7896023456789702345678980 2345678 990234567 89100345678
scFvIZI06.1     GVPDRFSGSGSGTDFTLKISRVEAEDVGVYYC SQSTHVPYT FGGGTKVEIKR
scFvIG11        ..............................  ......... ..........
scFvT12B        ..............................  ..G...... ..........
scFvFRK13.7     ...S.............T..SLQP..FAT... ..S...... ..........
```

Fig. 5

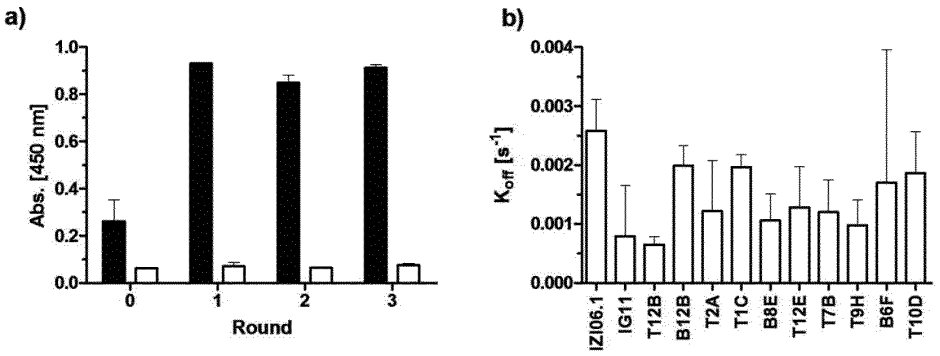
a)
Abs. [450 nm]
1.0
0.8
0.6
0.4
0.2
0.0
0
1
2
3
Round
b)
K_{off} [s^{-1}]
0.004
0.003
0.002
0.001
0.000
IZI06.1
IG11
T12B
B12B
T2A
T1C
B8E
T12E
T7B
T9H
B6F
T10D

Fig. 6

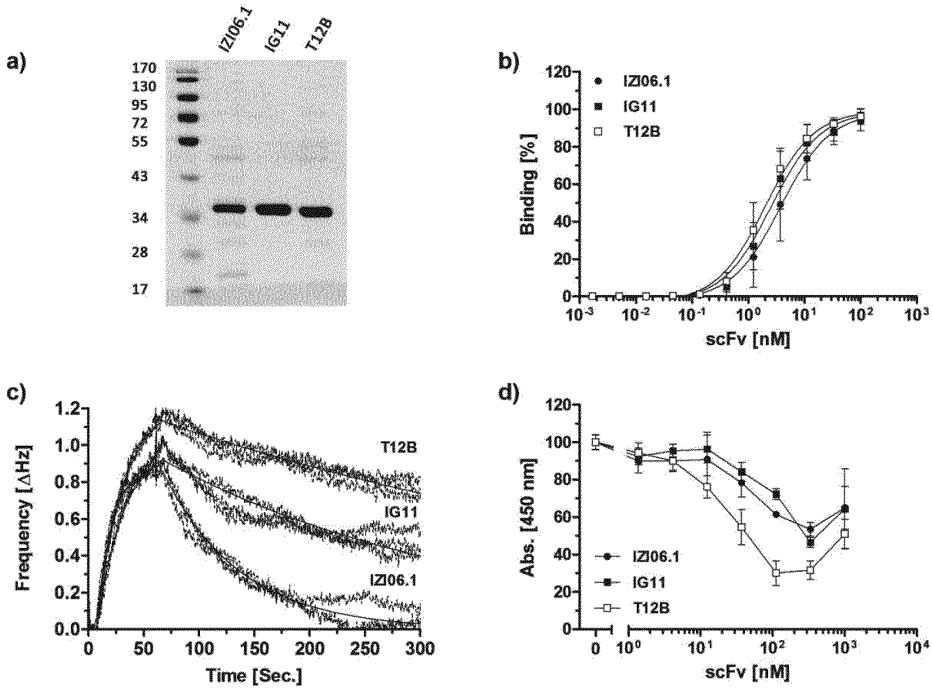
a)
IZI06.1
IG11
T12B
170
130
95
72
55
43
34
28
17
b)
Binding [%]
IZI06.1
IG11
T12B
scFv [nM]
c)
Frequency [ΔHz]
T12B
IG11
IZI06.1
Time [Sec.]
d)
Abs. [450 nm]
IZI06.1
IG11
T12B
scFv [nM]

Fig. 7

a)

```
                FR1                                CDRH1 FR2             CDRH2
Kabat           1234567891023456789202345678933 02345 6789402345678950 2a3456789602345
scFvIZI06.1     QVQLVQSGAEVKKPGSSVKVSCKASGYTFT DFYIN WVRQAPGQGLEWIG EIYPYSGHAYYNEKFKA
FRK13.1         .....E..GGLV...G.LRL..A...F..S ..... .I.....K....VS ....G............
FRK13.2         .....E..GGLV...G.LRL..A...F..S ..... .I.....K....VS ....G............

                FR3                                  CDRH3  FR4
Kabat           6789702345678980 2abc34567899023 4 567891 003456789110
scFvIZI06.1     RVTITADKSTSTAYMELSSLRSEDTAVYYCAR WDFLDY WGQGTTVTVSS
FRK13.1         .F..SR.NAKNSL.LQMN...A.......... ...... ..........
FRK13.2         .F..SA.NAKNSL.LQMN...A.......... ...... ..........
```

b)

```
                FR1                       CDRL1             FR2              CDRL2
Kabat           1234567891023456789202 3 4567abcde8930234 5678940 23456789 5023456
scFvIZI06.1     DIVMTQSPLSLPVTPGEPASISC RSSQSLLHSNGNTYLH WYLQKPGQSPQLLIY TVSNRFS
FRK13.1         .IQ.....S..SASV.DRVT.T. ................ ..Q....KA.K.... .......
FRK13.2         .VQ.....S..SASV.DRVT.T. ................ ..Q....KA.K.... .......

                FR3                                  CDRL3     FR4
Kabat           7896023456789702345678980 2345678 990234567 89100345678
scFvIZI06.1     GVPDRFSGSGSGTDFTLKISRVEAEDVGVYYC SQSTHVPYT FGGGTKVEIKR
FRK13.1         ...S.............T..SLQP..FAT... ......... ...........
FRK13.2         ...S.............T..SLQP..FAT... ......... ...........
```

Fig. 8

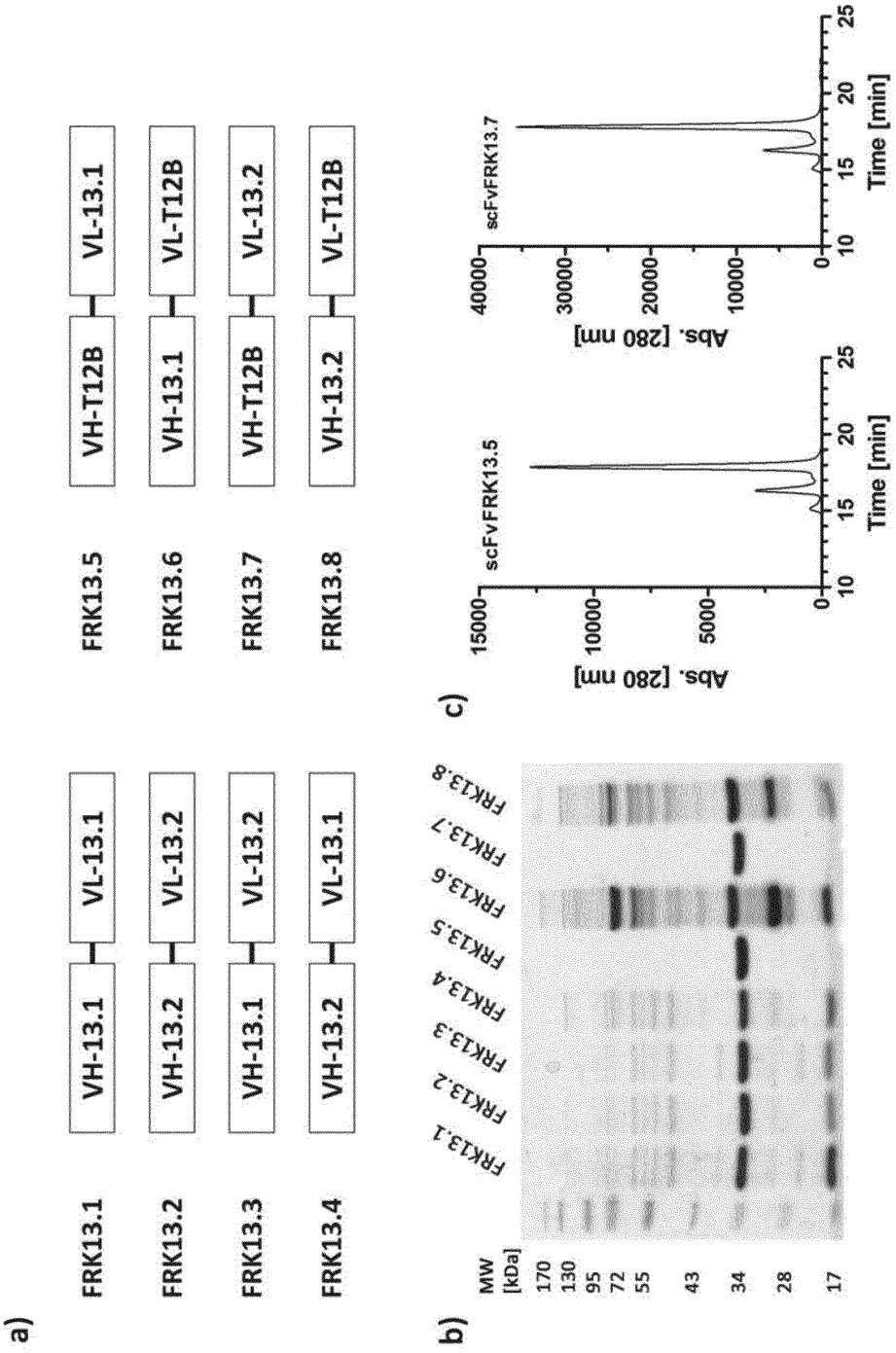
a)
FRK13.1
VH-13.1
VL-13.1
FRK13.2
VH-13.2
VL-13.2
FRK13.3
VH-13.1
VL-13.2
FRK13.4
VH-13.2
VL-13.1
FRK13.5
VH-T12B
VL-13.1
FRK13.6
VH-13.1
VL-T12B
FRK13.7
VH-T12B
VL-13.2
FRK13.8
VH-13.2
VL-T12B
b)
MW [kDa]
170
130
95
72
55
43
34
28
17
FRK13.1
FRK13.2
FRK13.3
FRK13.4
FRK13.5
FRK13.6
FRK13.7
FRK13.8
c)
scFvFRK13.5
scFvFRK13.7
Abs. [280 nm]
Time [min]

Fig. 9

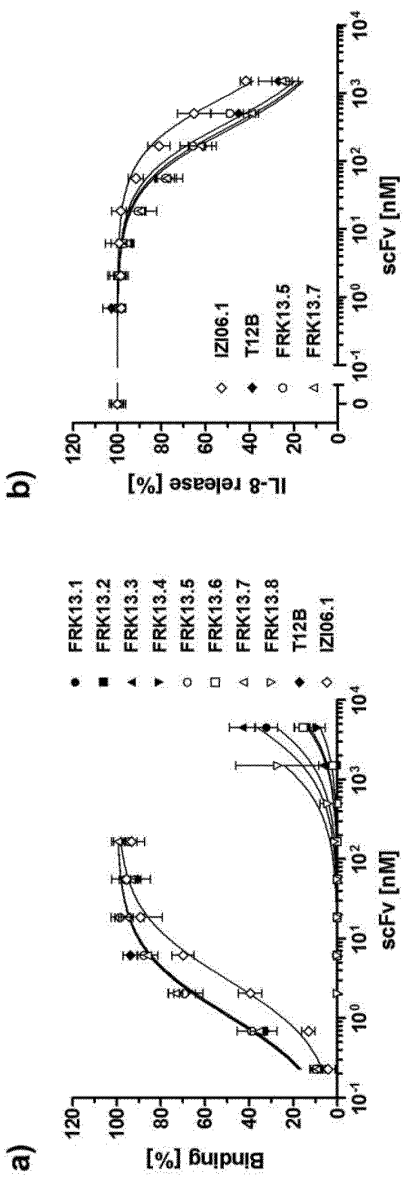
a)
Binding [%]
scFv [nM]
FRK13.1
FRK13.2
FRK13.3
FRK13.4
FRK13.5
FRK13.6
FRK13.7
FRK13.8
T12B
IZI06.1
b)
IL-8 release [%]
scFv [nM]
IZI06.1
T12B
FRK13.5
FRK13.7

Fig. 10

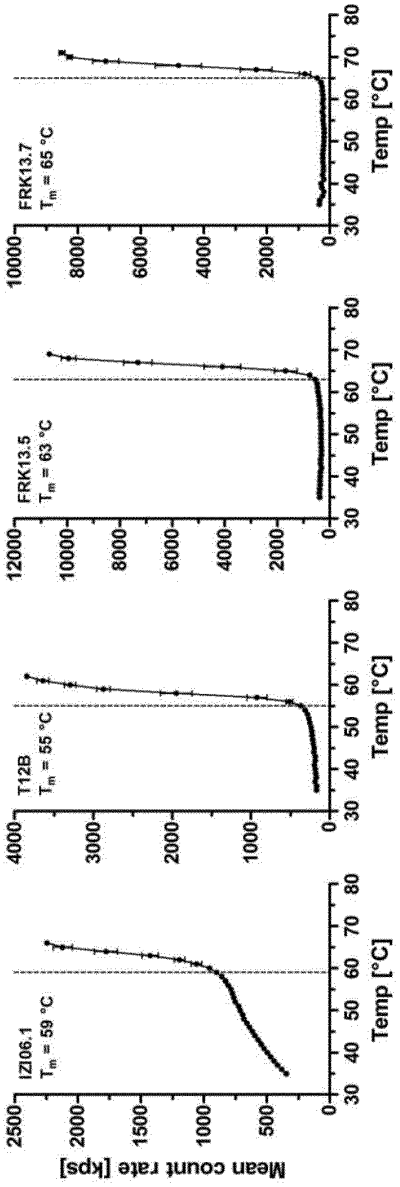
Mean count rate [kps]
Temp [°C]
IZI06.1
T_m = 59 °C
T12B
T_m = 55 °C
FRK13.5
T_m = 63 °C
FRK13.7
T_m = 65 °C

Fig. 11

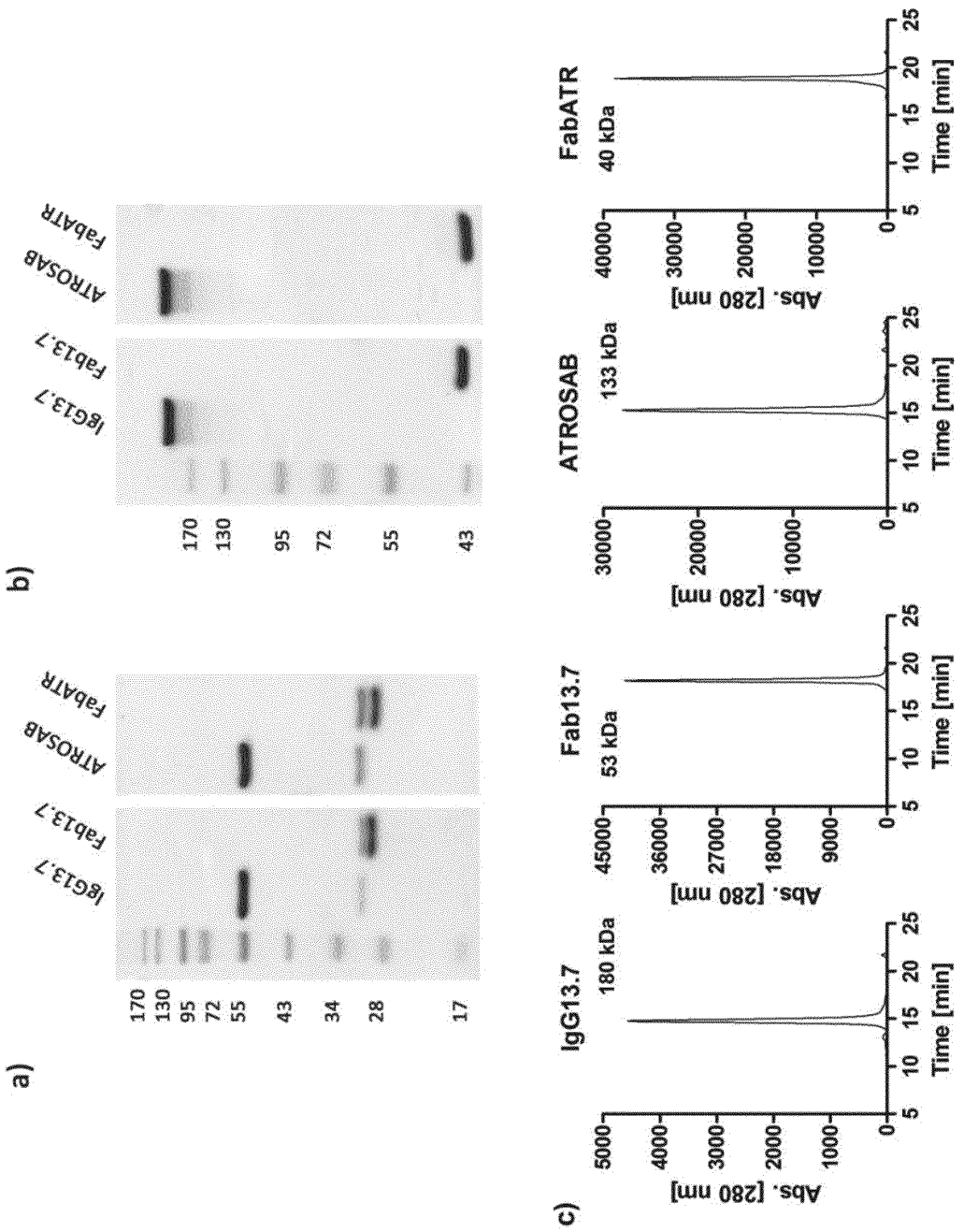
a)
170
130
95
72
55
43
34
28
17
IgG13.7
Fab13.7
ATROSAB
FabATR
b)
170
130
95
72
55
43
IgG13.7
Fab13.7
ATROSAB
FabATR
c)
IgG13.7
180 kDa
Fab13.7
53 kDa
ATROSAB
133 kDa
FabATR
40 kDa
Abs. [280 nm]
Time [min]

Fig. 12

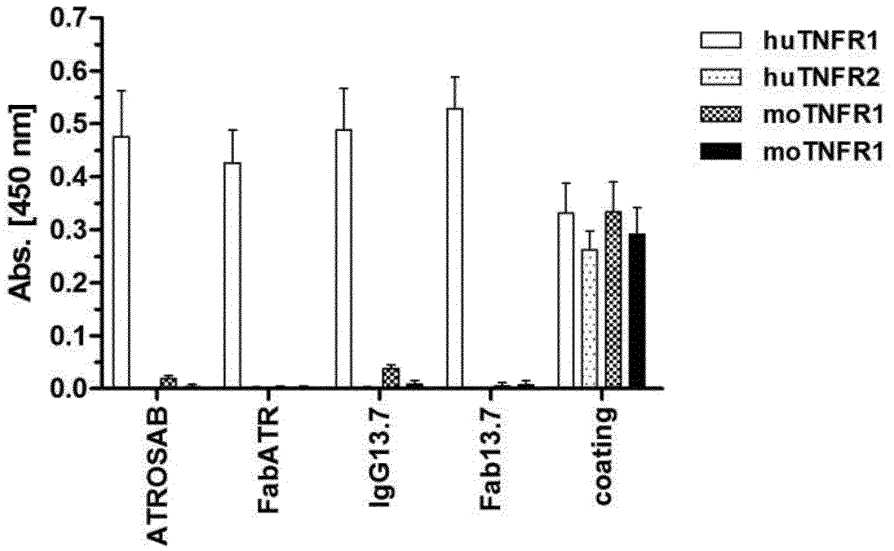
Abs. [450 nm]
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
huTNFR1
huTNFR2
moTNFR1
moTNFR1
ATROSAB
FabATR
IgG13.7
Fab13.7
coating

Fig. 13

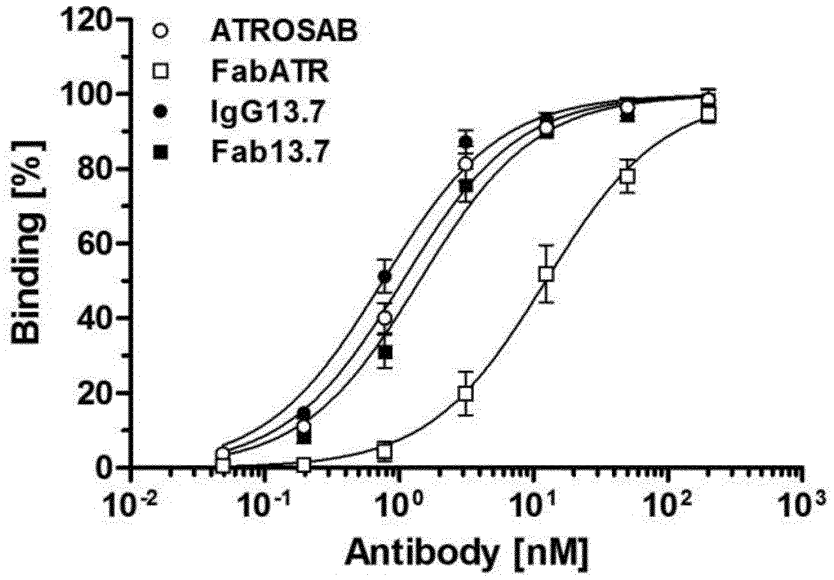
Binding [%]
120
100
80
60
40
20
0
ATROSAB
FabATR
IgG13.7
Fab13.7
10-2
10-1
100
101
102
103
Antibody [nM]

Fig. 14

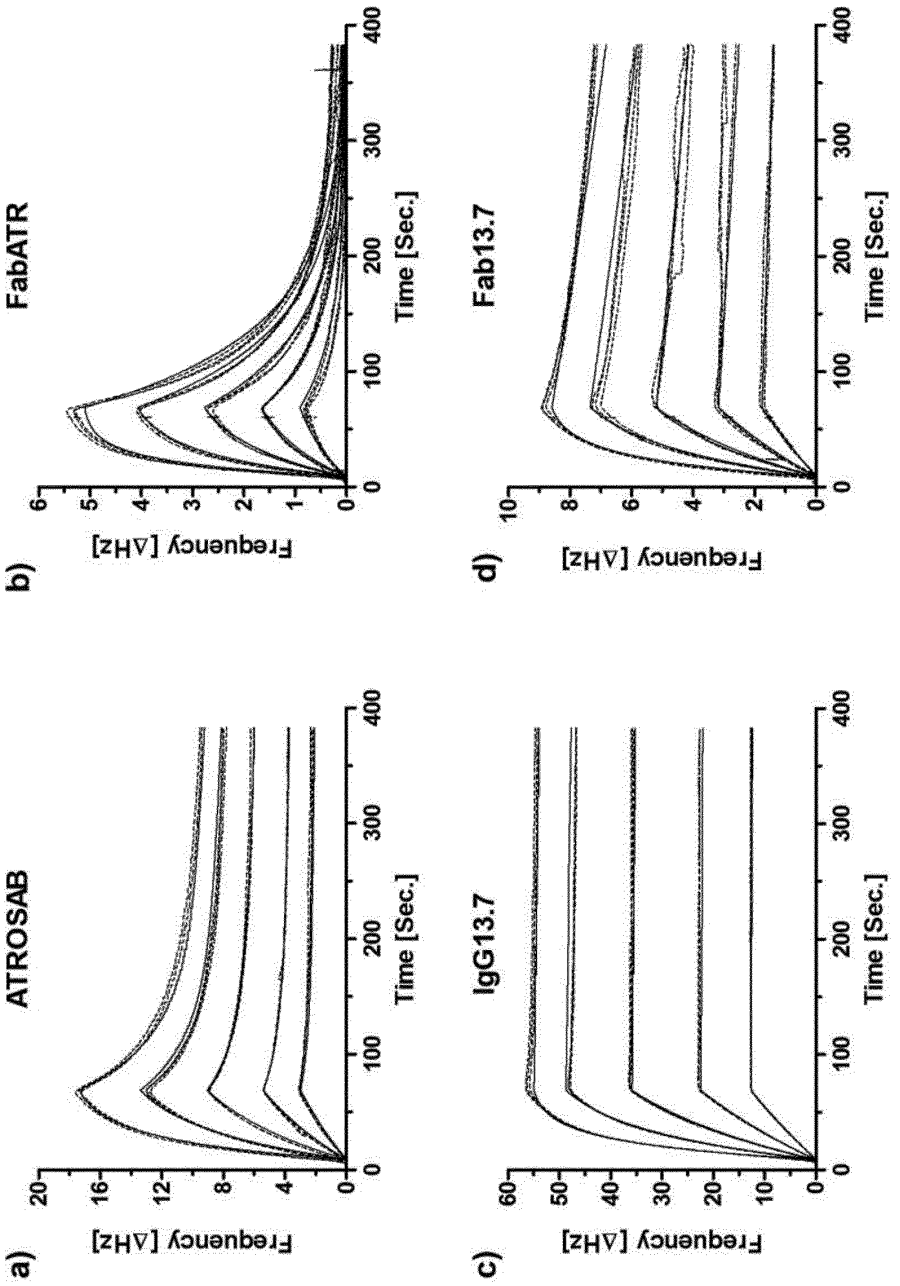
a)
ATROSAB
Frequency [ΔHz]
Time [Sec.]
b)
FabATR
Frequency [ΔHz]
Time [Sec.]
c)
IgG13.7
Frequency [ΔHz]
Time [Sec.]
d)
Fab13.7
Frequency [ΔHz]
Time [Sec.]

Fig. 15

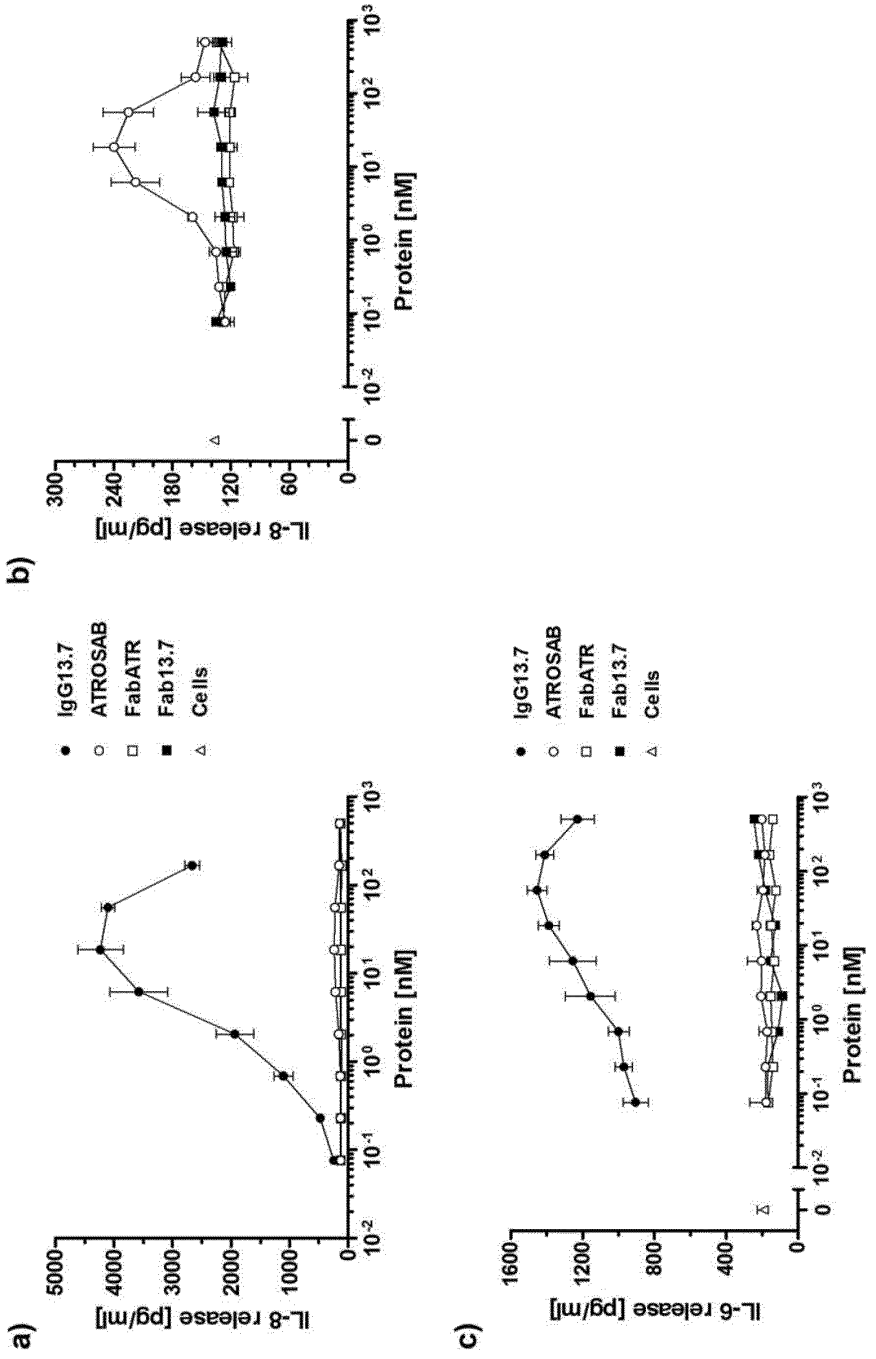
a)
b)
c)
IgG13.7
ATROSAB
FabATR
Fab13.7
Cells
IL-8 release [pg/ml]
IL-6 release [pg/ml]
Protein [nM]

Fig. 16

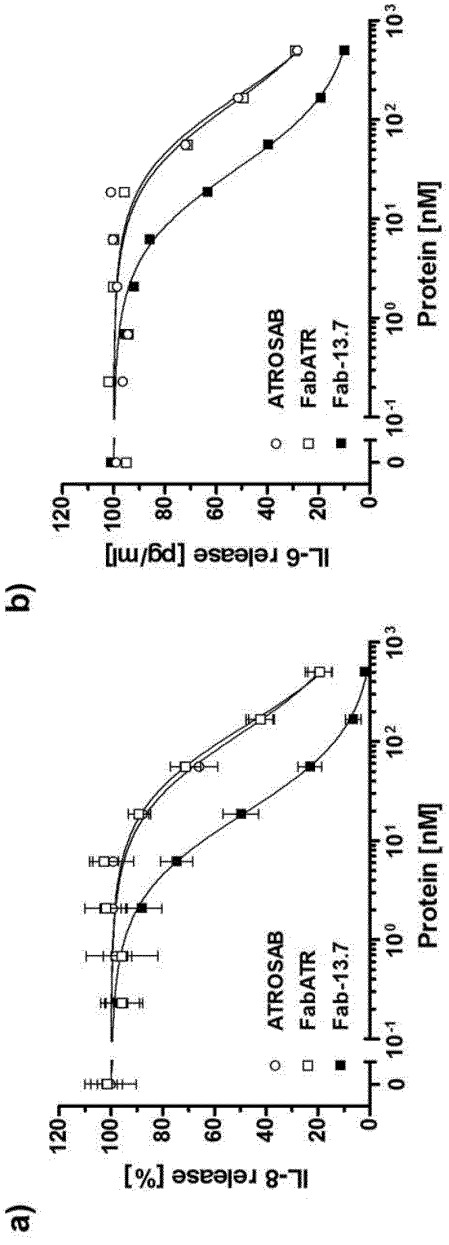
a)
IL-8 release [%]
Protein [nM]
ATROSAB
FabATR
Fab-13.7
b)
IL-6 release [pg/ml]
Protein [nM]
ATROSAB
FabATR
Fab-13.7

Fig. 17

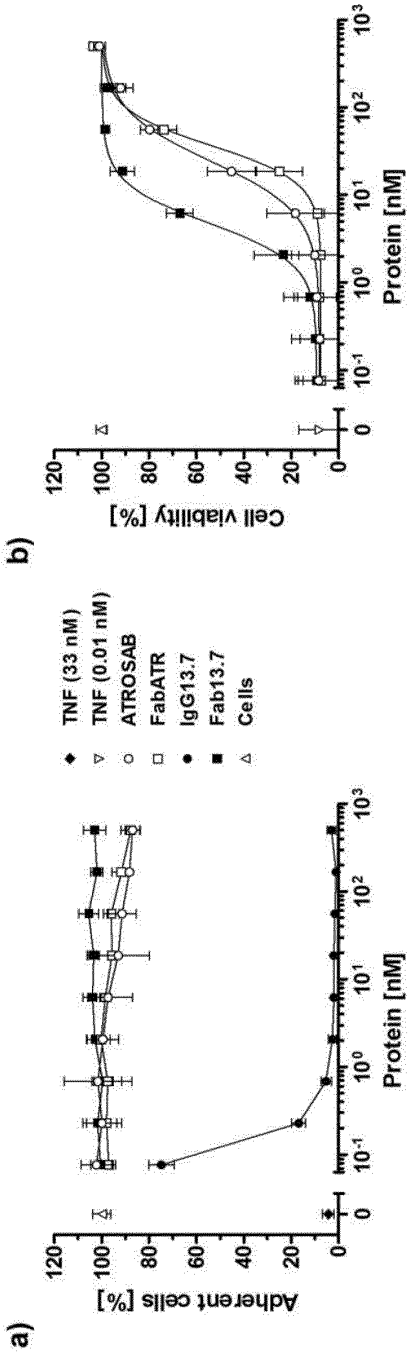
a)
Adherent cells [%]
Protein [nM]
TNF (33 nM)
TNF (0.01 nM)
ATROSAB
FabATR
IgG13.7
Fab13.7
Cells
b)
Cell viability [%]
Protein [nM]

Fig. 18

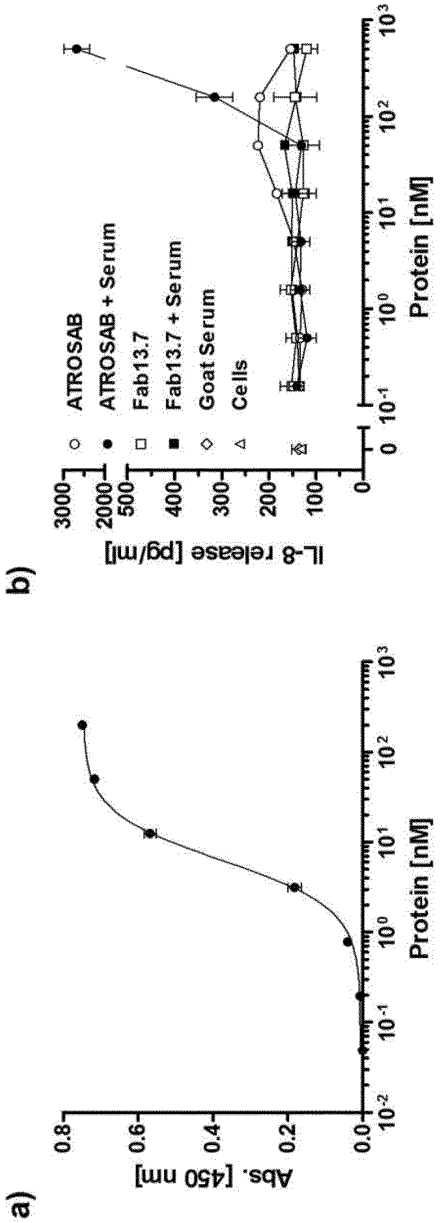
a)
Abs. [450 nm]
0.0
0.2
0.4
0.6
0.8
10^{-2}
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
Protein [nM]
b)
IL-8 release [pg/ml]
0
100
200
300
400
500
2000
3000
ATROSAB
ATROSAB + Serum
Fab13.7
Fab13.7 + Serum
Goat Serum
Cells
0
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
Protein [nM]

Fig. 19

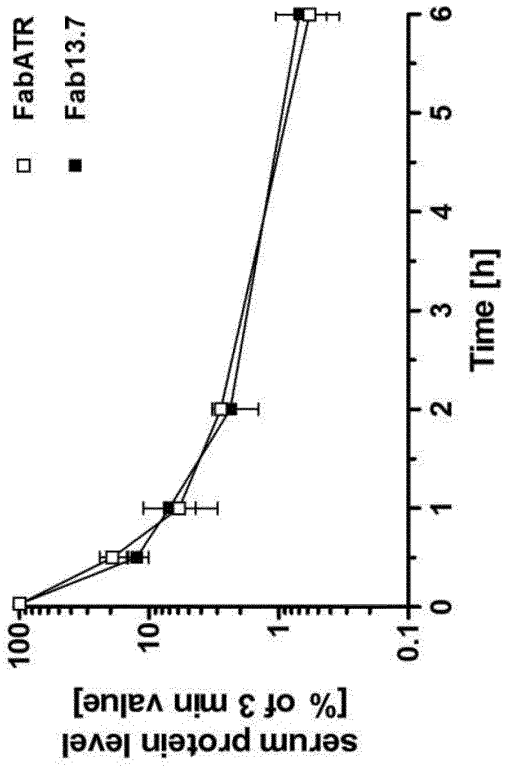
FabATR
Fab13.7
serum protein level
[% of 3 min value]
100
10
1
0.1
0
1
2
3
4
5
6
Time [h]

Fig. 20

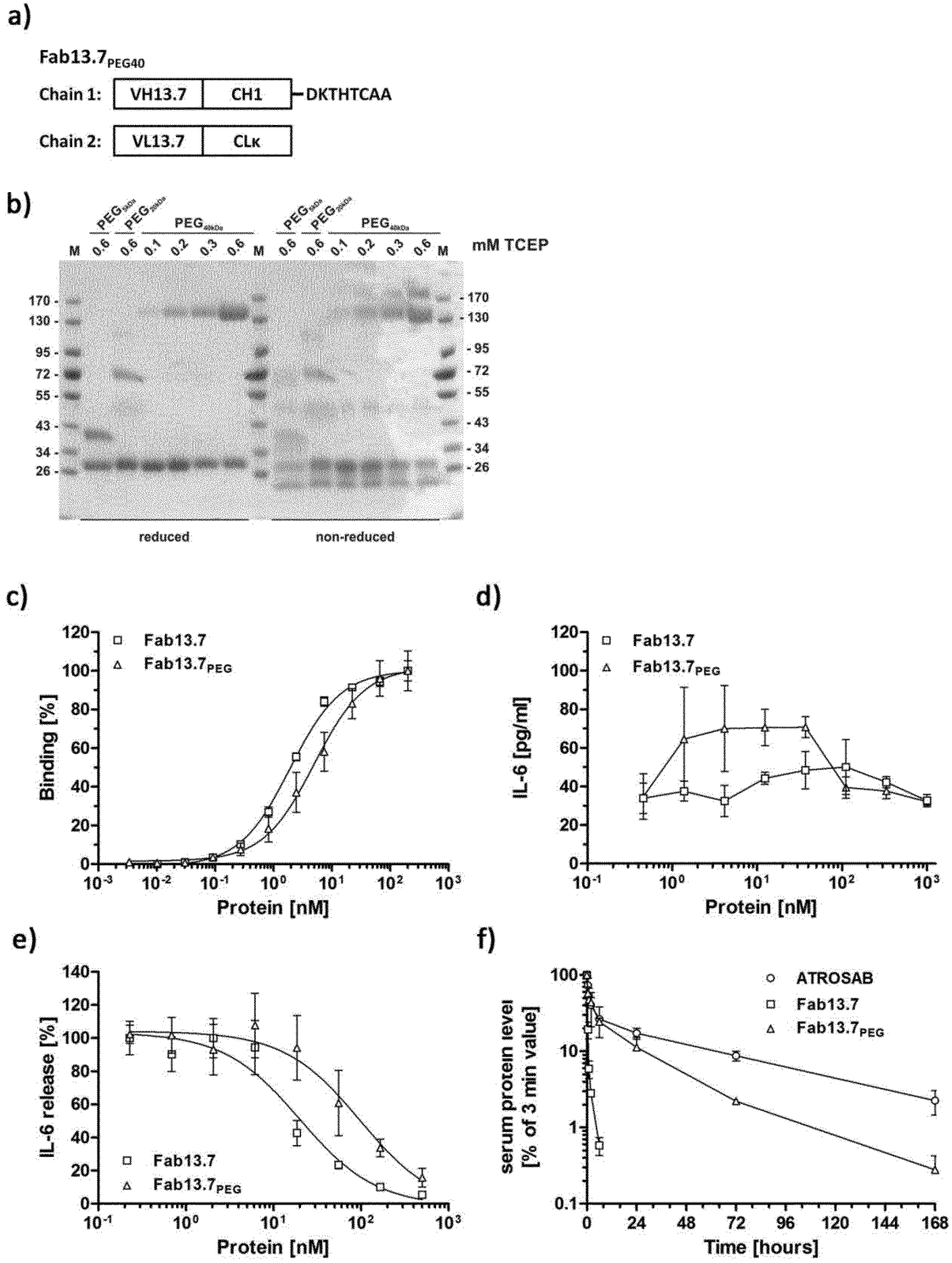
a)
Fab13.7PEG40
Chain 1:
VH13.7
CH1
DKTHTCAA
Chain 2:
VL13.7
CLκ
b)
PEG5kDa
PEG25kDa
PEG40kDa
M
0.6
0.6
0.1
0.2
0.3
0.6
M
mM TCEP
170
130
95
72
55
43
34
26
reduced
non-reduced
c)
Fab13.7
Fab13.7PEG
Binding [%]
Protein [nM]
d)
IL-6 [pg/ml]
e)
IL-6 release [%]
f)
ATROSAB
serum protein level [% of 3 min value]
Time [hours]

Fig. 21

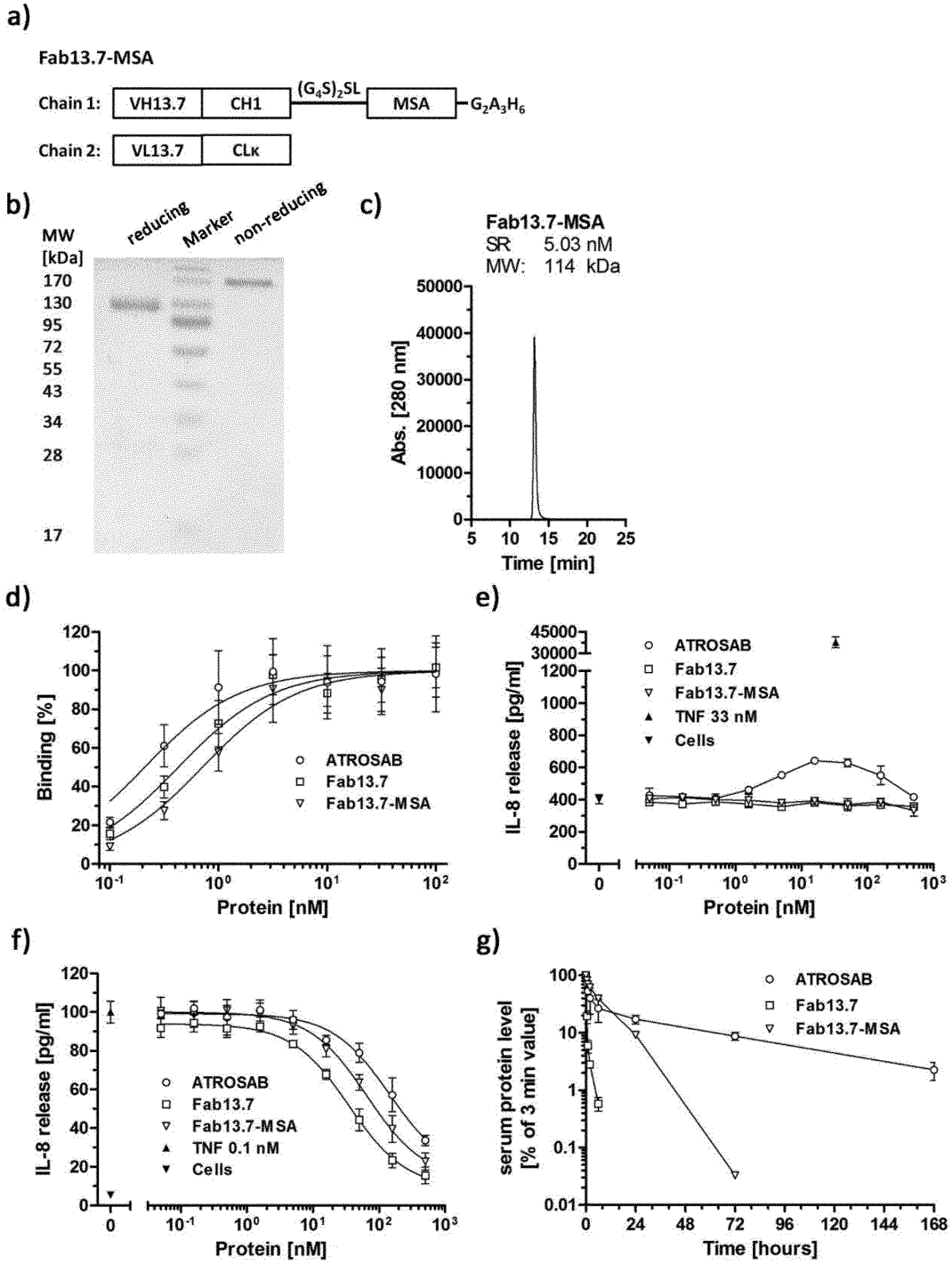
a)
Fab13.7-MSA
Chain 1:
VH13.7
CH1
(G4S)2SL
MSA
G2A3H6
Chain 2:
VL13.7
CLκ
b)
MW [kDa]
reducing
Marker
non-reducing
170
130
95
72
55
43
34
28
17
c)
Fab13.7-MSA
SR 5.03 nM
MW: 114 kDa
Abs. [280 nm]
Time [min]
d)
Binding [%]
Protein [nM]
ATROSAB
Fab13.7
Fab13.7-MSA
e)
IL-8 release [pg/ml]
Protein [nM]
ATROSAB
Fab13.7
Fab13.7-MSA
TNF 33 nM
Cells
f)
IL-8 release [pg/ml]
Protein [nM]
ATROSAB
Fab13.7
Fab13.7-MSA
TNF 0.1 nM
Cells
g)
serum protein level [% of 3 min value]
Time [hours]
ATROSAB
Fab13.7
Fab13.7-MSA

Fig. 22

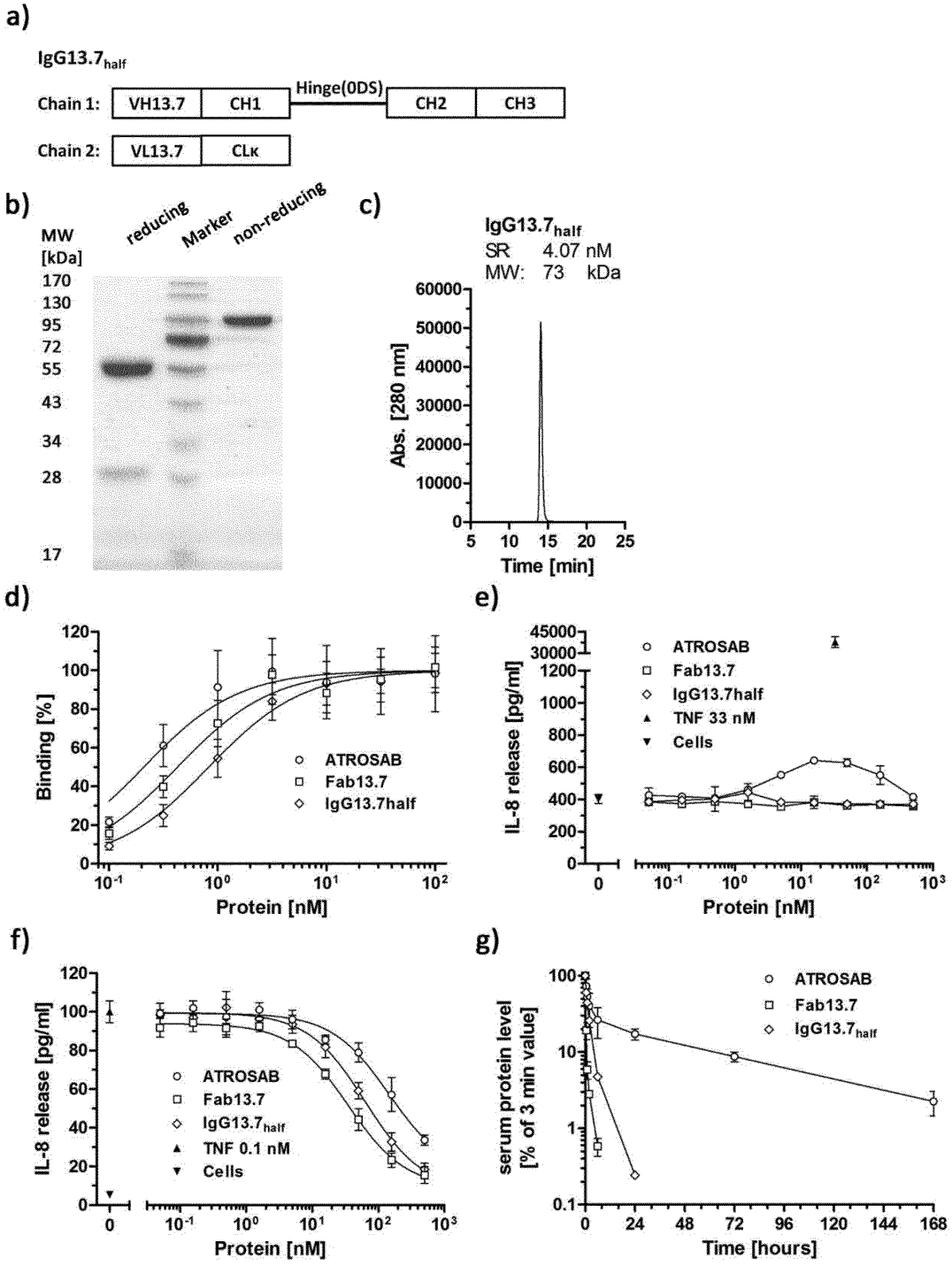
a)
IgG13.7half
Chain 1:
VH13.7
CH1
Hinge(0DS)
CH2
CH3
Chain 2:
VL13.7
CLκ
b)
MW [kDa]
reducing
Marker
non-reducing
170
130
95
72
55
43
34
28
17
c)
IgG13.7half
SR 4.07 nM
MW: 73 kDa
Abs. [280 nm]
Time [min]
d)
Binding [%]
ATROSAB
Fab13.7
IgG13.7half
Protein [nM]
e)
IL-8 release [pg/ml]
ATROSAB
Fab13.7
IgG13.7half
TNF 33 nM
Cells
Protein [nM]
f)
IL-8 release [pg/ml]
ATROSAB
Fab13.7
IgG13.7half
TNF 0.1 nM
Cells
Protein [nM]
g)
serum protein level [% of 3 min value]
ATROSAB
Fab13.7
IgG13.7half
Time [hours]

Fig. 23

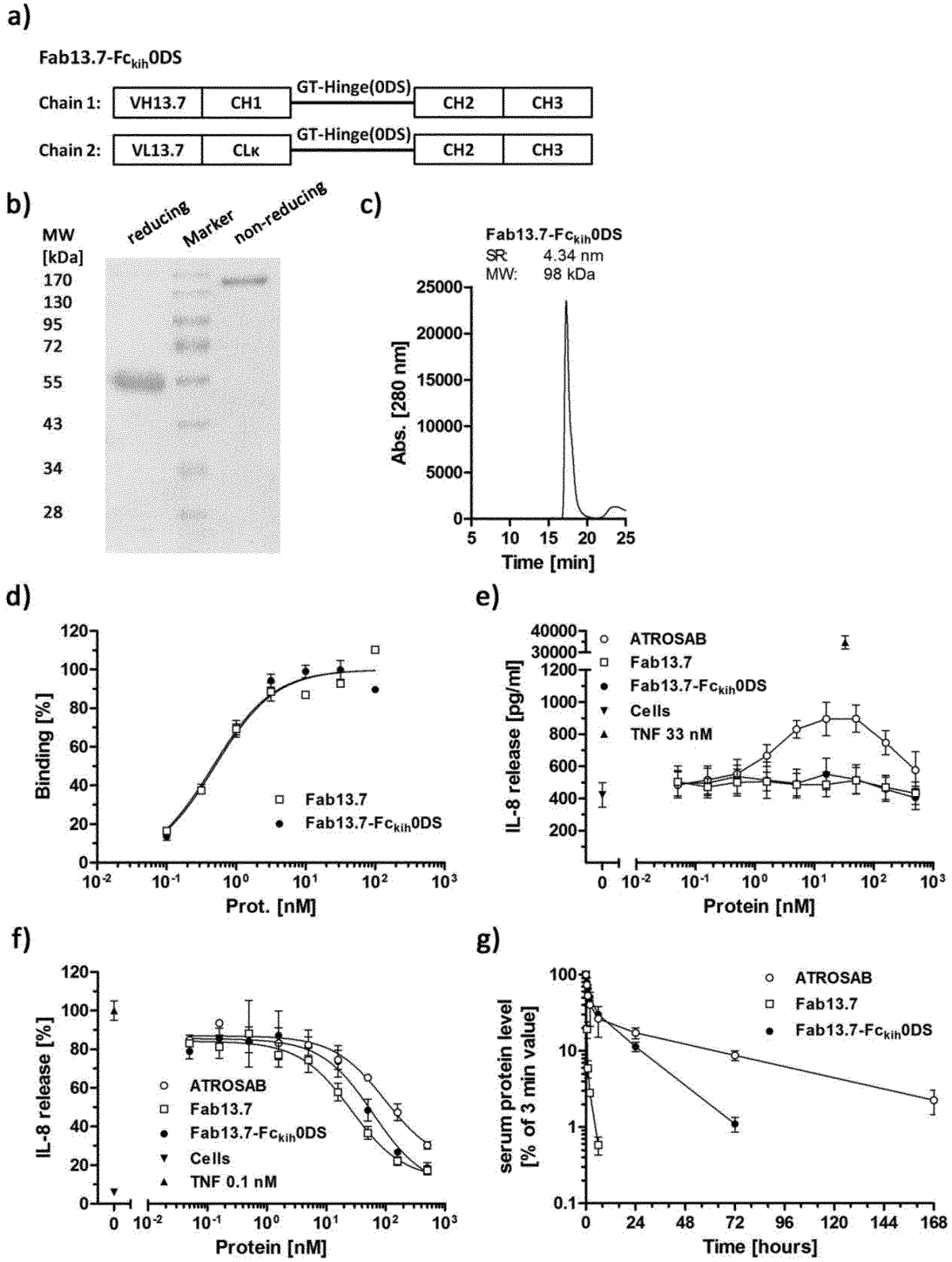
a)
Fab13.7-Fc$_{kih}$0DS
Chain 1: VH13.7 CH1 GT-Hinge(0DS) CH2 CH3
Chain 2: VL13.7 CLκ GT-Hinge(0DS) CH2 CH3
b)
MW [kDa]
reducing
Marker
non-reducing
170
130
95
72
55
43
34
28
c)
Fab13.7-Fc$_{kih}$0DS
SR: 4.34 nm
MW: 98 kDa
Abs. [280 nm]
Time [min]
d)
Binding [%]
Prot. [nM]
Fab13.7
Fab13.7-Fc$_{kih}$0DS
e)
IL-8 release [pg/ml]
Protein [nM]
ATROSAB
Fab13.7
Fab13.7-Fc$_{kih}$0DS
Cells
TNF 33 nM
f)
IL-8 release [%]
Protein [nM]
ATROSAB
Fab13.7
Fab13.7-Fc$_{kih}$0DS
Cells
TNF 0.1 nM
g)
serum protein level [% of 3 min value]
Time [hours]
ATROSAB
Fab13.7
Fab13.7-Fc$_{kih}$0DS

Fig. 24

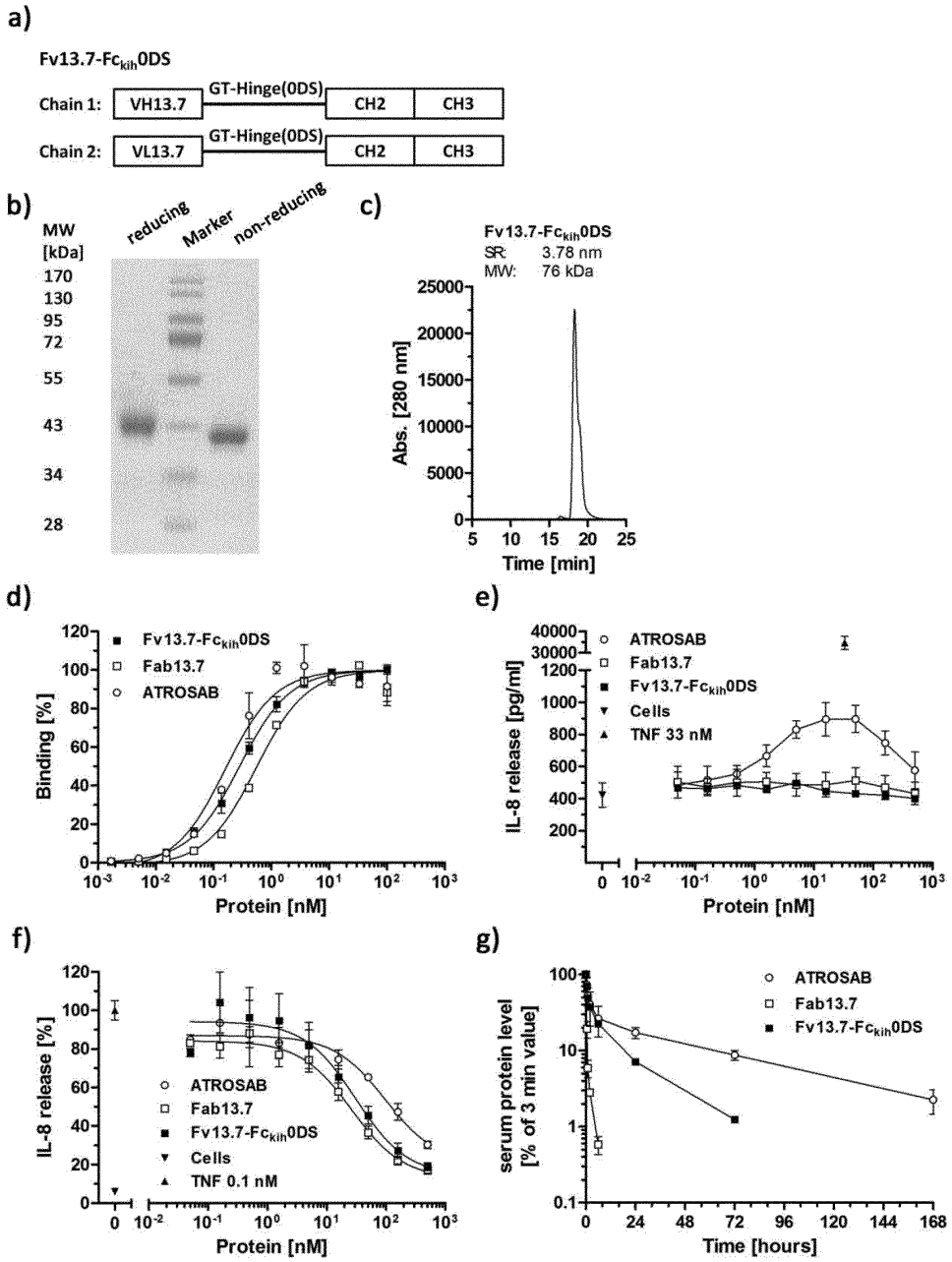
a)
Fv13.7-Fc$_{kih}$0DS
Chain 1:
VH13.7
GT-Hinge(0DS)
CH2
CH3
Chain 2:
VL13.7
GT-Hinge(0DS)
CH2
CH3
b)
MW [kDa]
reducing
Marker
non-reducing
170
130
95
72
55
43
34
28
c)
Fv13.7-Fc$_{kih}$0DS
SR: 3.78 nm
MW: 76 kDa
Abs. [280 nm]
Time [min]
d)
Fv13.7-Fc$_{kih}$0DS
Fab13.7
ATROSAB
Binding [%]
Protein [nM]
e)
ATROSAB
Fab13.7
Fv13.7-Fc$_{kih}$0DS
Cells
TNF 33 nM
IL-8 release [pg/ml]
Protein [nM]
f)
ATROSAB
Fab13.7
Fv13.7-Fc$_{kih}$0DS
Cells
TNF 0.1 nM
IL-8 release [%]
Protein [nM]
g)
ATROSAB
Fab13.7
Fv13.7-Fc$_{kih}$0DS
serum protein level [% of 3 min value]
Time [hours]

Fig. 25

SEQ ID 1: DFYIN

SEQ ID 2: EIYPYSGHAYYNEKFKA

SEQ ID 3: WDFLDY

SEQ ID 4: RSSQSLLHSNGNTYLH

SEQ ID 5: TVSNRFS

SEQ ID 6: SQSTHVPYT

SEQ ID 7: EIXPXXGXAXYNXKFKA
Wherein
X at position 3 is any of Y or V,
X at position 5 is any of Y, T or S,
X at position 6 is any of S or Q,
X at position 8 is any of H or E,
X at position 10 is any of Y or K,
X at position 13 is any of E or D.

SEQ ID 8: SQXTHVPYT
Wherein X at position 3 is any of S or G.

SEQ ID 9: EIVPTQGEAKYNDKFKA

SEQ ID 10: EIVPXQGEAKYNDKFKA
Wherein
X at position 5 is any of S or G

SEQ ID 11: SQXTHVPYT
Wherein
X at position 3 is any of G or S

SEQ ID 12:
QVQLVQSGAEVKKPGSSVKVSCKASGYTFTDFYINWVRQAPGQGLEWIGEIVPTQGE
AKYNDKFKARVTITADKSTSTAYMELSSLRSEDTAVYYCARWDFLDYWGQGTTVTVS
S

SEQ ID 13:
HVQLVQSGAEVKKPGSSVKVSCKASGYTFTDFYINWVRQAPGQGLEWIGEIVPSQGE
AKYNDKFKARVTITADKSTSTAYMELSSLRSEDTAVYYCARWDFLDYWGQGTTVTVS
S

Fig. 25 (continued)

SEQ ID 14:
QVQLVESGGGLVKPGGSLRLSCAASGFTFSDFYINWIRQAPGKGLEWVSEIYPYSGHA
YYNEKFKARFTISRDNAKNSLYLQMNSLRAEDTAVYYCARWDFLDYWGQGTTVTVSS

SEQ ID 15:
QVQLVESGGGLVKPGGSLRLSCAASGFTFSDFYINWIRQAPGKGLEWVSEIYPYSGHA
YYNEKFKARFTISADNAKNSLYLQMNSLRAEDTAVYYCARWDFLDYWGQGTTVTVSS

SEQ ID 16:
DIVMTQSPLSLPVTPGEPASISCRSSQSLLHSNGNTYLHWYLQKPGQSPQLLIYTVSNR
FSGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCSQSTHVPYTFGGGTKVEIKR

SEQ ID 17:
DIVMTQSPLSLPVTPGEPASISCRSSQSLLHSNGNTYLHWYLQKPGQSPQLLIYTVSNR
FSGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCSQGTHVPYTFGGGTKVEIKR

SEQ ID 18:
DIQMTQSPSSLSASVGDRVTITCRSSQSLLHSNGNTYLHWYQQKPGKAPKLLIYTVSN
RFSGVPSRFSGSGSGTDFTLTISSLQPEDFATYYCSQSTHVPYTFGGGTKVEIK

SEQ ID 19:
DVQMTQSPSSLSASVGDRVTITCRSSQSLLHSNGNTYLHWYQQKPGKAPKLLIYTVSN
RFSGVPSRFSGSGSGTDFTLTISSLQPEDFATYYCSQSTHVPYTFGGGTKVEIK

SEQ ID 20:
QVQLVQSGAEVKKPGSSVKVSCKASGYTFTDFYINWVRQAPGQGLEWIGEIYPYSGH
AYYNEKFKARVTITADKSTSTAYMELSSLRSEDTAVYYCARWDFLDYWGQGTTVTVSS

SEQ ID 21:
DIVMTQSPLSLPVTPGEPASISCRSSQSLLHSNGNTYLHWYLQKPGQSPQLLIYTVSNR
FSGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCSQSTHVPYTFGGGTKVEIKR

SEQ ID 22:
QVQLVQSGAEVKKPGSSVKVSCKASGYTFTDFYINWVRQAPGQGLEWIGEIYPYSGH
AYYNEKFKARVTITADKSTSTAYMELSSLRSEDTAVYYCARWDFLDYWGQGTTVTVSS

SEQ ID 23:
DIVMTQSPLSLPVTPGEPASISCRSSQSLLHSNGNTYLHWYLQKPGQSPQLLIYTVSNR
FSGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCSQSTHVPYTFGGGTKVEIKR

SEQ ID 24:
DKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWY
VDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTI
SKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT
TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Fig. 25 (continued)

SEQ ID 25:
HVQLVQSGAEVKKPGSSVKVSCKASGYTFTDFYINWVRQAPGQGLEWIGEIVPSQGE
AKYNDKFKARVTITADKSTSTAYMELSSLRSEDTAVYYCARWDFLDYWGQGTTVTVS
SASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVL
QSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSC

SEQ ID 26:
DVQMTQSPSSLSASVGDRVTITCRSSQSLLHSNGNTYLHWYQQKPGKAPKLLIYTVSN
RFSGVPSRFSGSGSGTDFTLTISSLQPEDFATYYCSQSTHVPYTFGGGTKVEIKRTVA
APSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDS
KDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

SEQ ID 27:
HVQLVQSGAEVKKPGSSVKVSCKASGYTFTDFYINWVRQAPGQGLEWIGEIVPSQGE
AKYNDKFKARVTITADKSTSTAYMELSSLRSEDTAVYYCARWDFLDYWGQGTTVTVS
SASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVL
QSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCAA

SEQ ID 28:
HVQLVQSGAEVKKPGSSVKVSCKASGYTFTDFYINWVRQAPGQGLEWIGEIVPSQGE
AKYNDKFKARVTITADKSTSTAYMELSSLRSEDTAVYYCARWDFLDYWGQGTTVTVS
SASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVL
QSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCGGGGSGGGGSS
LEAHKSEIAHRYNDLGEQHFKGLVLIAFSQYLQKCSYDEHAKLVQEVTDFAKTCVADES
AANCDKSLHTLFGDKLCAIPNLRENYGELADCCTKQEPERNECFLQHKDDNPSLPPFE
RPEAEAMCTSFKENPTTFMGHYLHEVARRHPYFYAPELLYYAEQYNEILTQCCAEADK
ESCLTPKLDGVKEKALVSSVRQRMKCSSMQKFGERAFKAWAVARLSQTFPNADFAEI
TKLATDLTKVNKECCHGDLLECADDRAELAKYMCENQATISSKLQTCCDKPLLKKAHC
LSEVEHDTMPADLPAIAADFVEDQEVCKNYAEAKDVFLGTFLYEYSRRHPDYSVSLLL
RLAKKYEATLEKCCAEANPPACYGTVLAEFQPLVEEPKNLVKTNCDLYEKLGEYGFQN
AILVRYTQKAPQVSTPTLVEAARNLGRVGTKCCTLPEDQRLPCVEDYLSAILNRVCLLH
EKTPVSEHVTKCCSGSLVERRPCFSALTVDETYVPKEFKAETFTFHSDICTLPEKEKQI
KKQTALAELVKHKPKATAEQLKTVMDDFAQFLDTCCKAADKDTCFSTEGPNLVGGAA
AHHHHHH

SEQ ID 29:
HVQLVQSGAEVKKPGSSVKVSCKASGYTFTDFYINWVRQAPGQGLEWIGEIVPSQGE
AKYNDKFKARVTITADKSTSTAYMELSSLRSEDTAVYYCARWDFLDYWGQGTTVTVS
SASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVL
QSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTSPPSPAP
ELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK
PREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQV
YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTAPVLDSDGSFRL
RSDLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Fig. 25 (continued)

SEQ ID 30:
HVQLVQSGAEVKKPGSSVKVSCKASGYTFTDFYINWVRQAPGQGLEWIGEIVPSQGE
AKYNDKFKARVTITADKSTSTAYMELSSLRSEDTAVYYCARWDFLDYWGQGTTVTVS
SASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVL
QSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCGTDKTHTSPPSP
APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT
KPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQ
VYTLPPSRDELTKNQVSLSCAVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFF
LVSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID 31:
DVQMTQSPSSLSASVGDRVTITCRSSQSLLHSNGNTYLHWYQQKPGKAPKLLIYTVSN
RFSGVPSRFSGSGSGTDFTLTISSLQPEDFATYYCSQSTHVPYTFGGGTKVEIKRTVA
APSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDS
KDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGECGTDKTHTSPPSP
APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKT
KPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQ
VYTLPPSRDELTKNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSF
FLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID 32:
HVQLVQSGAEVKKPGSSVKVSCKASGYTFTDFYINWVRQAPGQGLEWIGEIVPSQGE
AKYNDKFKARVTITADKSTSTAYMELSSLRSEDTAVYYCARWDFLDYWGQGTTVTVS
SGTDKTHTSPPSPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN
WYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIE
KTISKAKGQPREPQVYTLPPSRDELTKNQVSLSCAVKGFYPSDIAVEWESNGQPENNY
KTTPPVLDSDGSFFLVSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID 33:
DVQMTQSPSSLSASVGDRVTITCRSSQSLLHSNGNTYLHWYQQKPGKAPKLLI
YTVSNRFSGVPSRFSGSGSGTDFTLTISSLQPEDFATYYCSQSTHVPYTFGGGTKVEI
KGTDKTHTSPPSPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN
WYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIE
KTISKAKGQPREPQVYTLPPSRDELTKNQVSLWCLVKGFYPSDIAVEWESNGQPENN
YKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID 34:
DKTHTCAA

SEQ ID 35:
DKTHTCPPCPAPELLGG

SEQ ID 36:
SASV

Fig. 25 (continued)

SEQ ID 37:
DRVT

SEQ ID 38:
SLQP

SEQ ID 39
GGLV

SEQ ID 40
NAKNSL

SEQ ID 41
LQMN

SEQ ID 42
GTDKTHTSPPCPAPPVAG

SEQ ID 43
GTDKTHTCPPSPAPPVAG

SEQ ID 44
GTDKTHTSPPSPAPPVAG