Figure 1

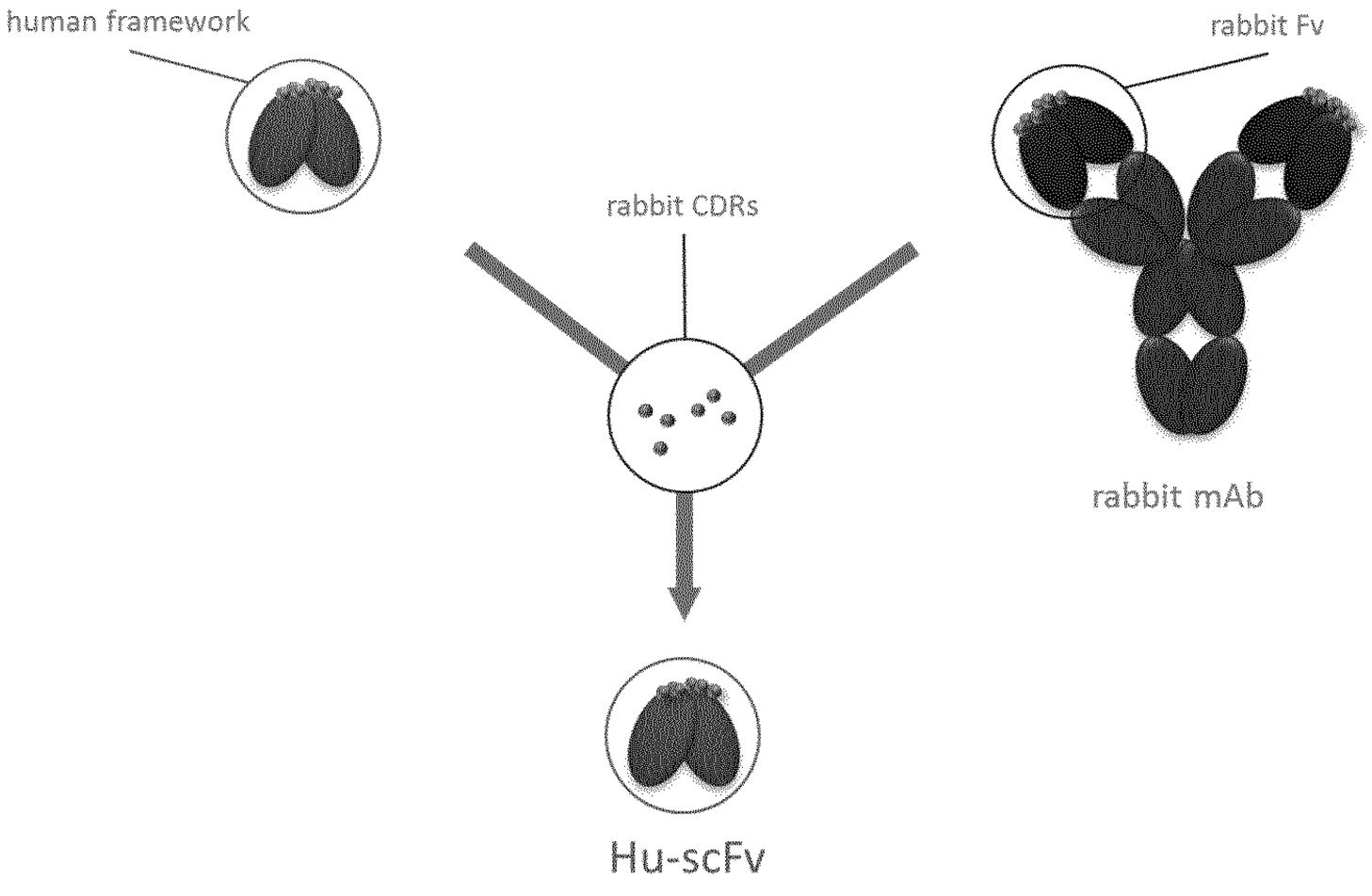
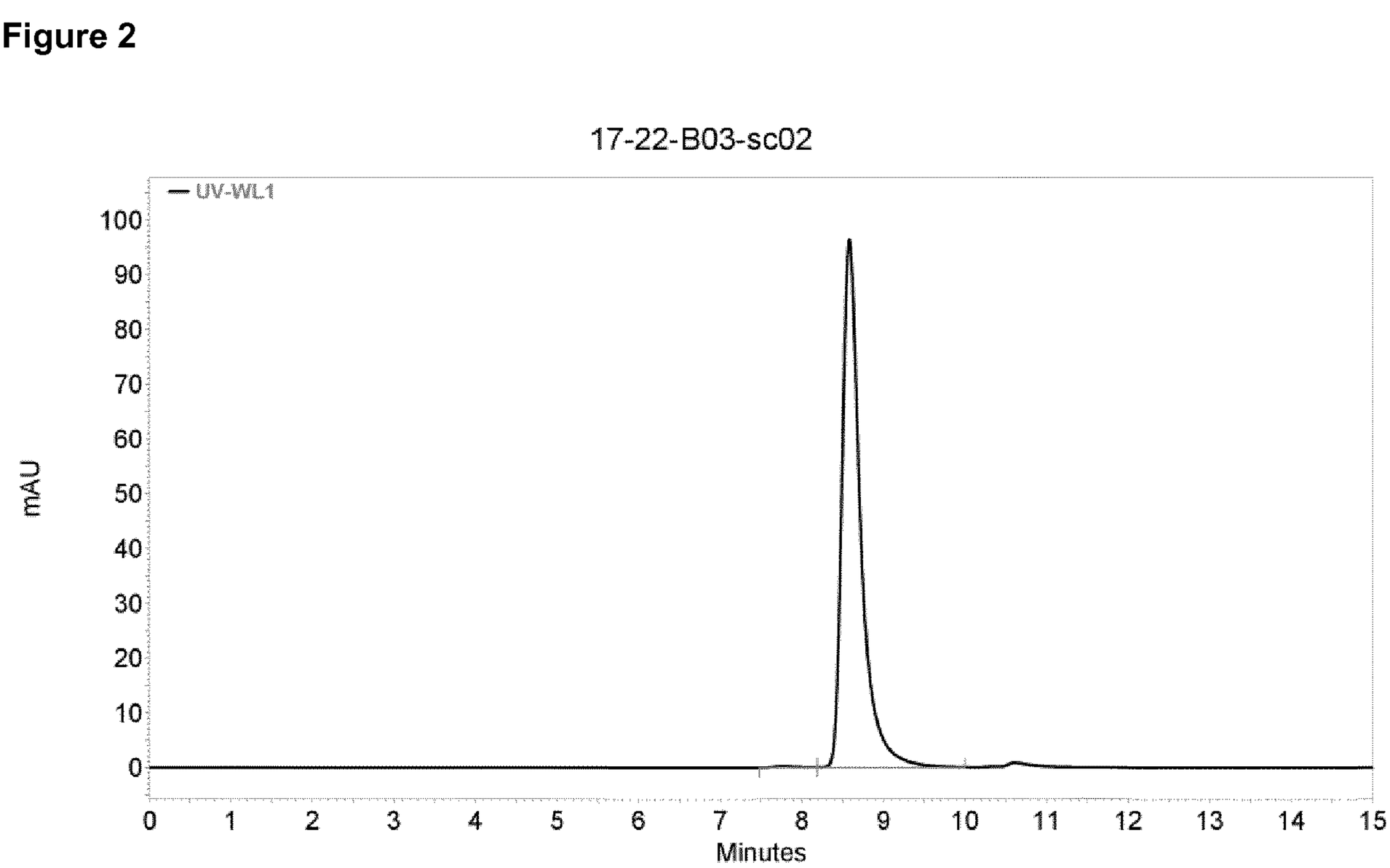


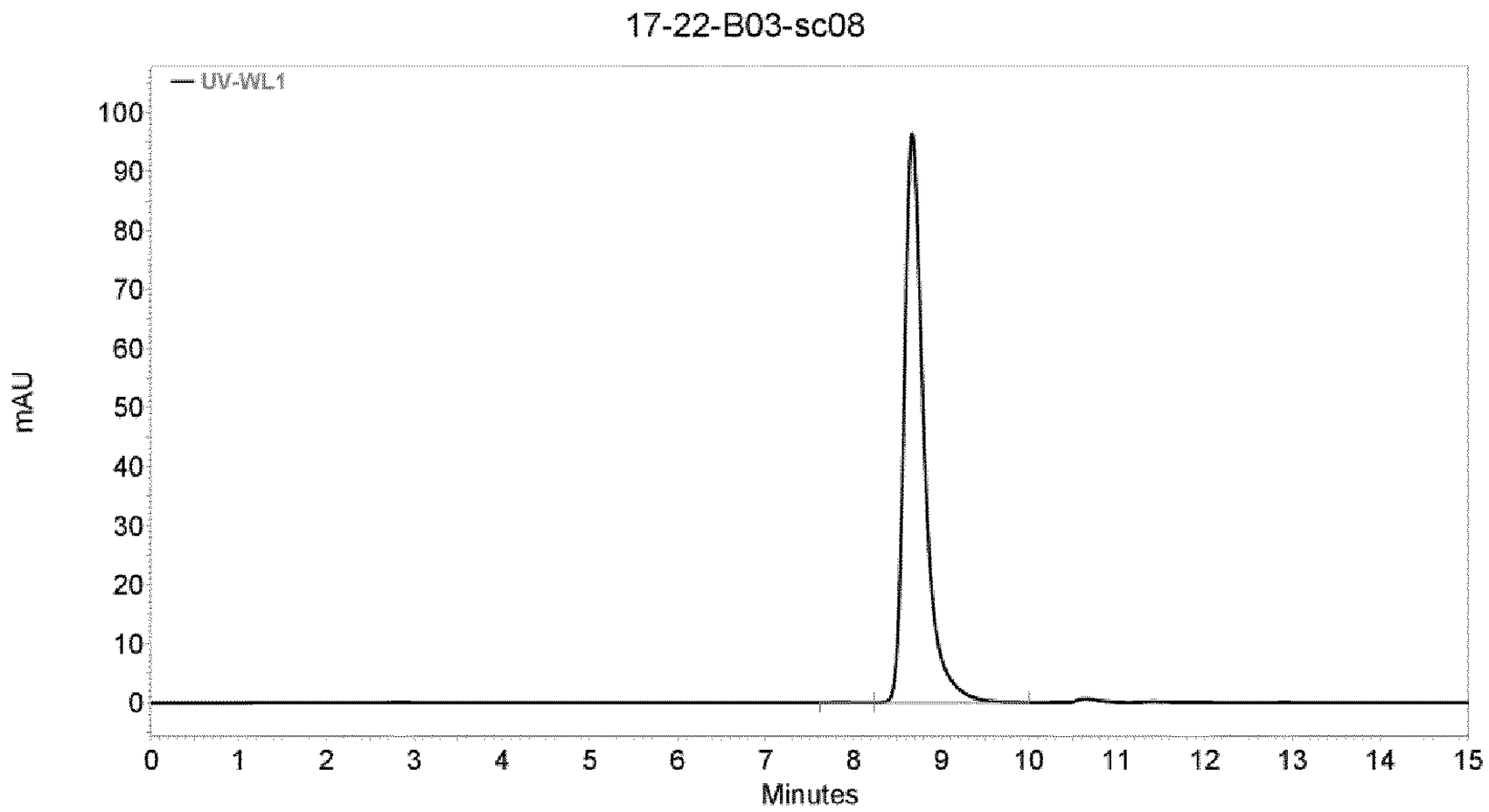
Figure 2



UV-WL1
Results

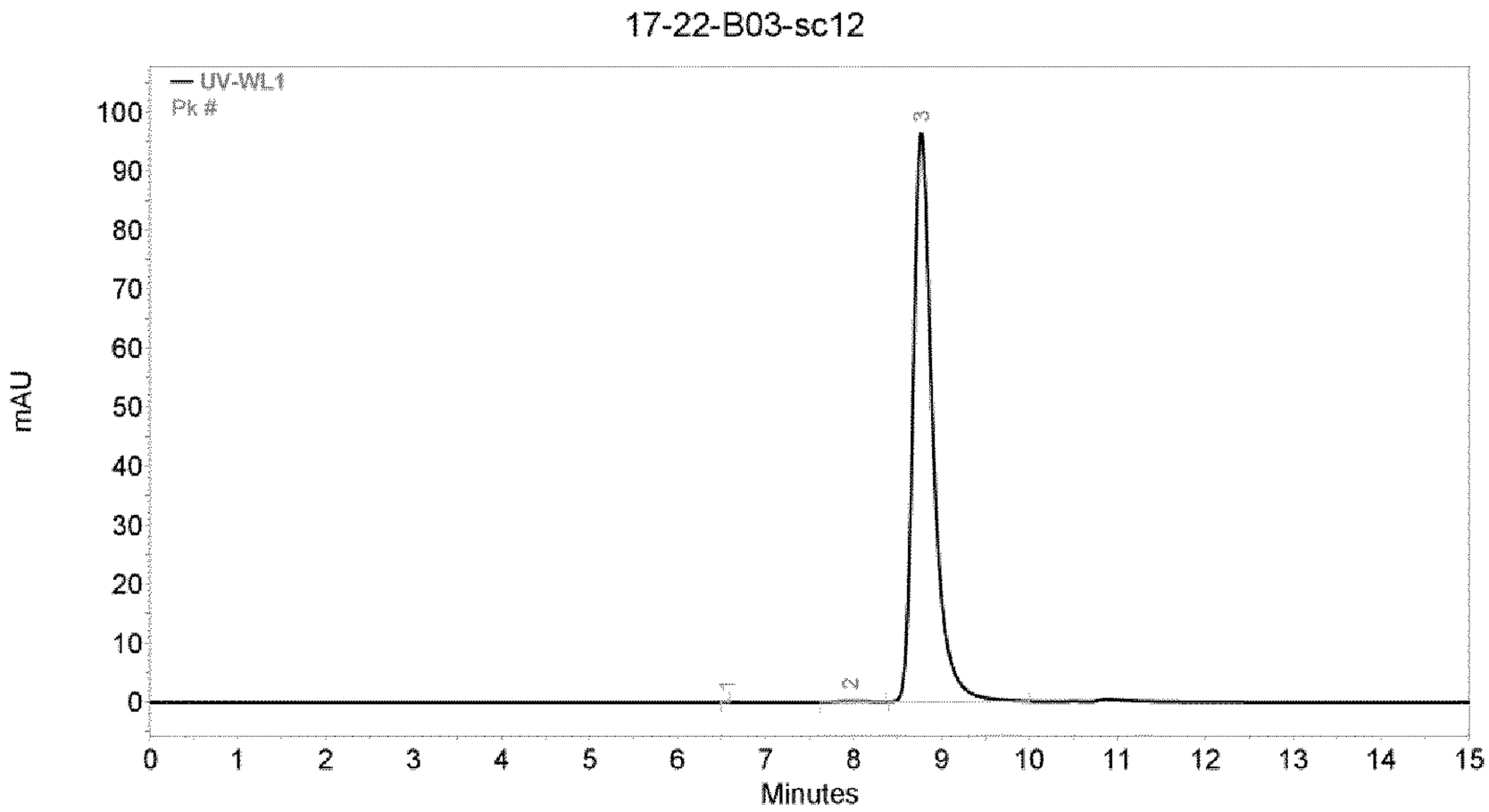
Pk #	Name	Retention Time	Area Percent	Area
1	dimeric scFv	7.767	0.34	19507
2	monomeric scFv	8.580	99.66	5774107
Totals			100.00	5793614

Figure 2 (continued)



UV-WL1
Results

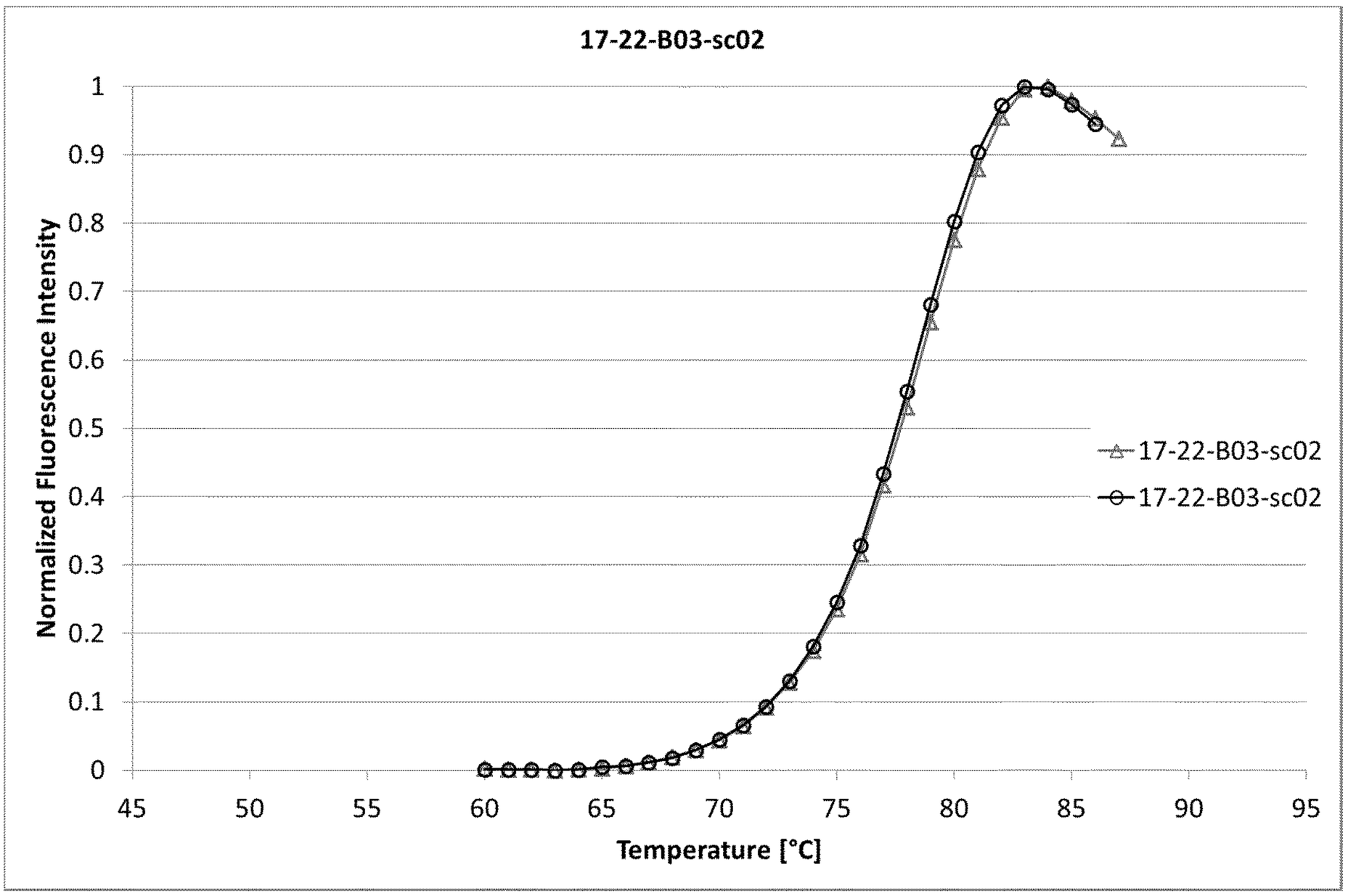
Pk #	Name	Retention Time	Area Percent	Area
1	dimeric scFv	7.847	0.11	6234
2	monomeric scFv	8.673	99.89	5535650
Totals			100.00	5541884

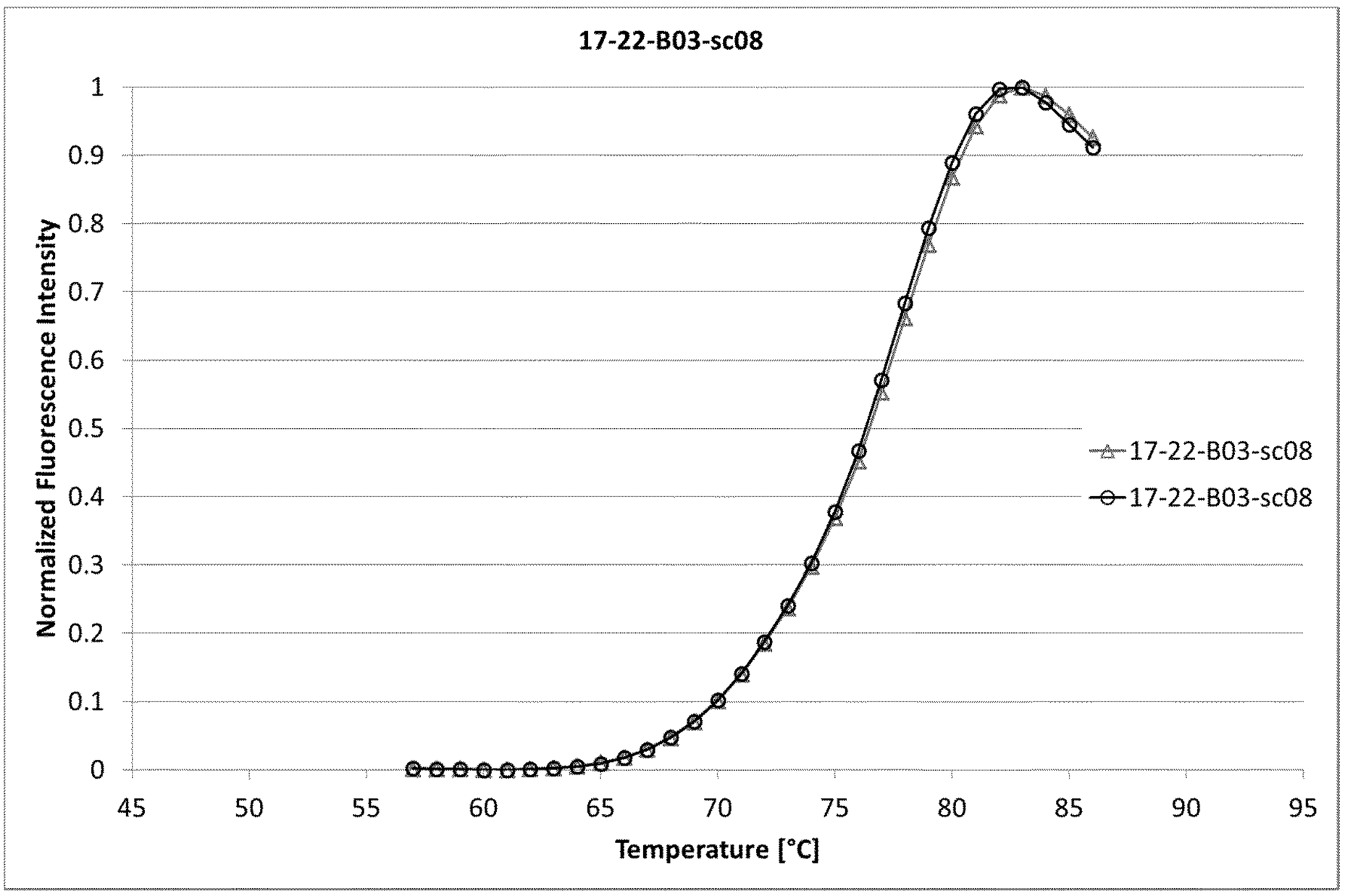


UV-WL1
Results

Pk #	Name	Retention Time	Area Percent	Area
1		6.560	0.00	134
2	dimeric scFv	7.960	0.16	9750
3	monomeric scFv	8.773	99.84	6020242
Totals			100.00	6030126

Figure 3


17-22-B03-sc02
Normalized Fluorescence Intensity
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
45
50
55
60
65
70
75
80
85
90
95
Temperature [°C]
17-22-B03-sc02
17-22-B03-sc02


17-22-B03-sc08
Normalized Fluorescence Intensity
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
45
50
55
60
65
70
75
80
85
90
95
Temperature [°C]
17-22-B03-sc08
17-22-B03-sc08

5

Figure 3 (continued)

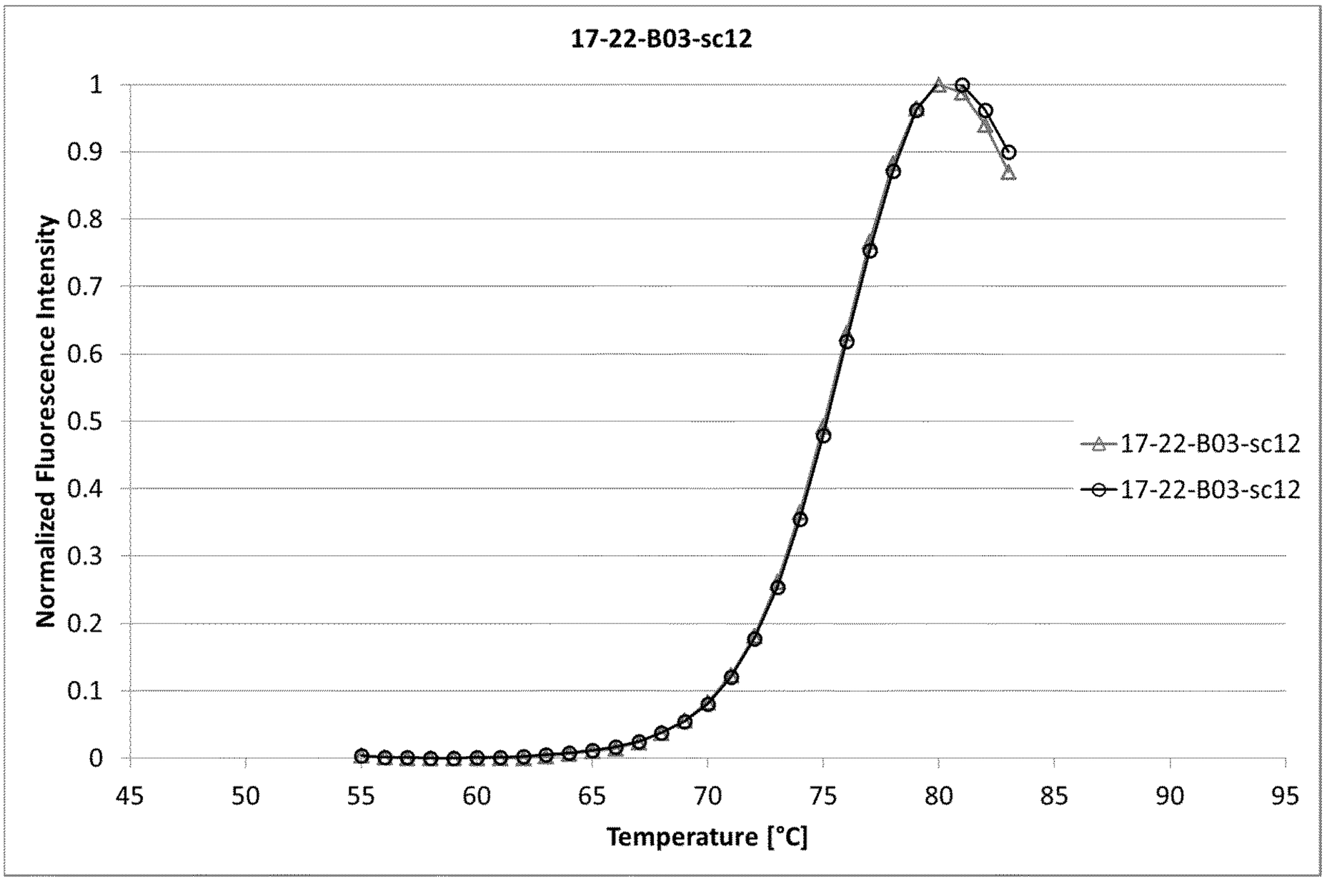
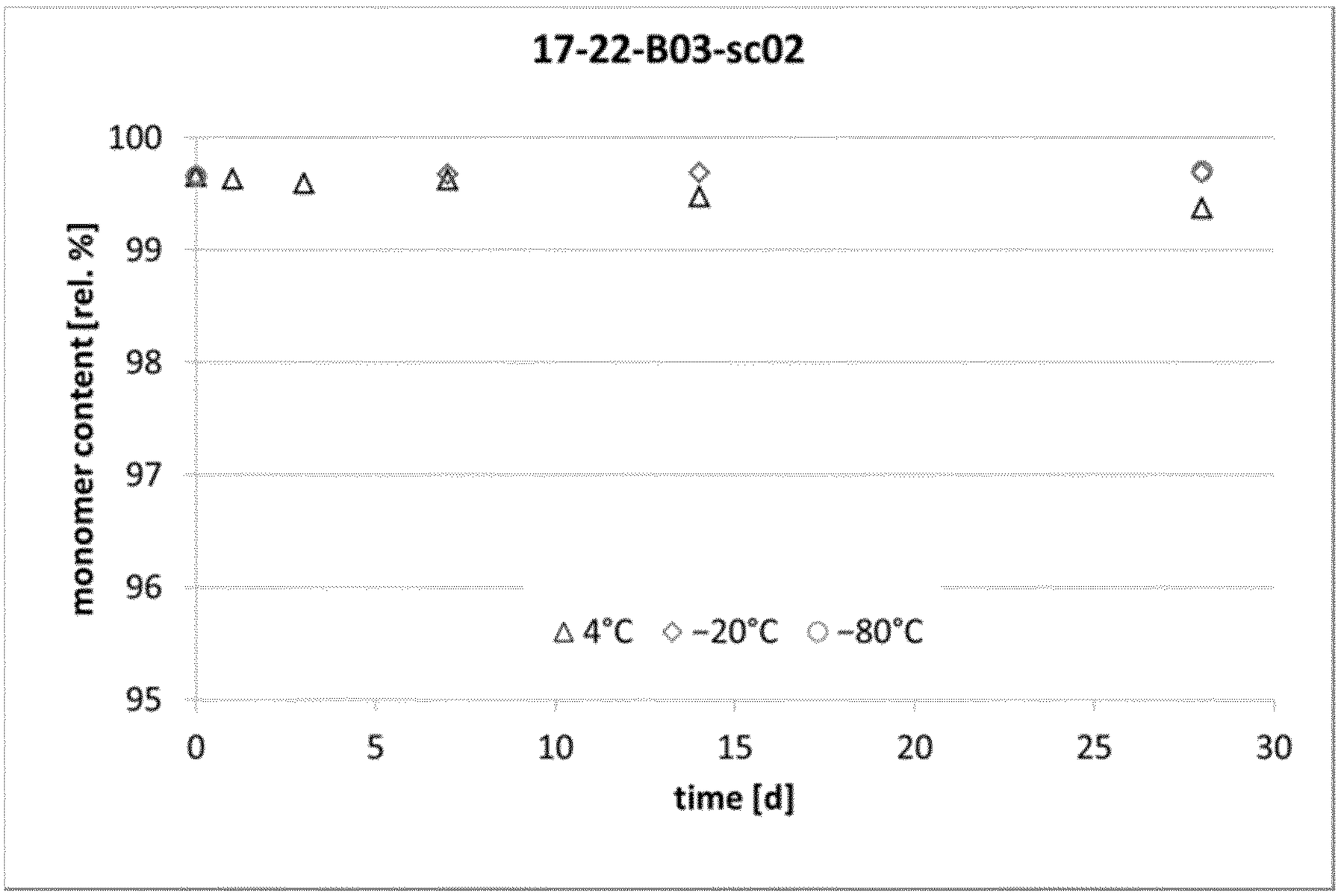


Figure 4



5

Figure 4 (continued)

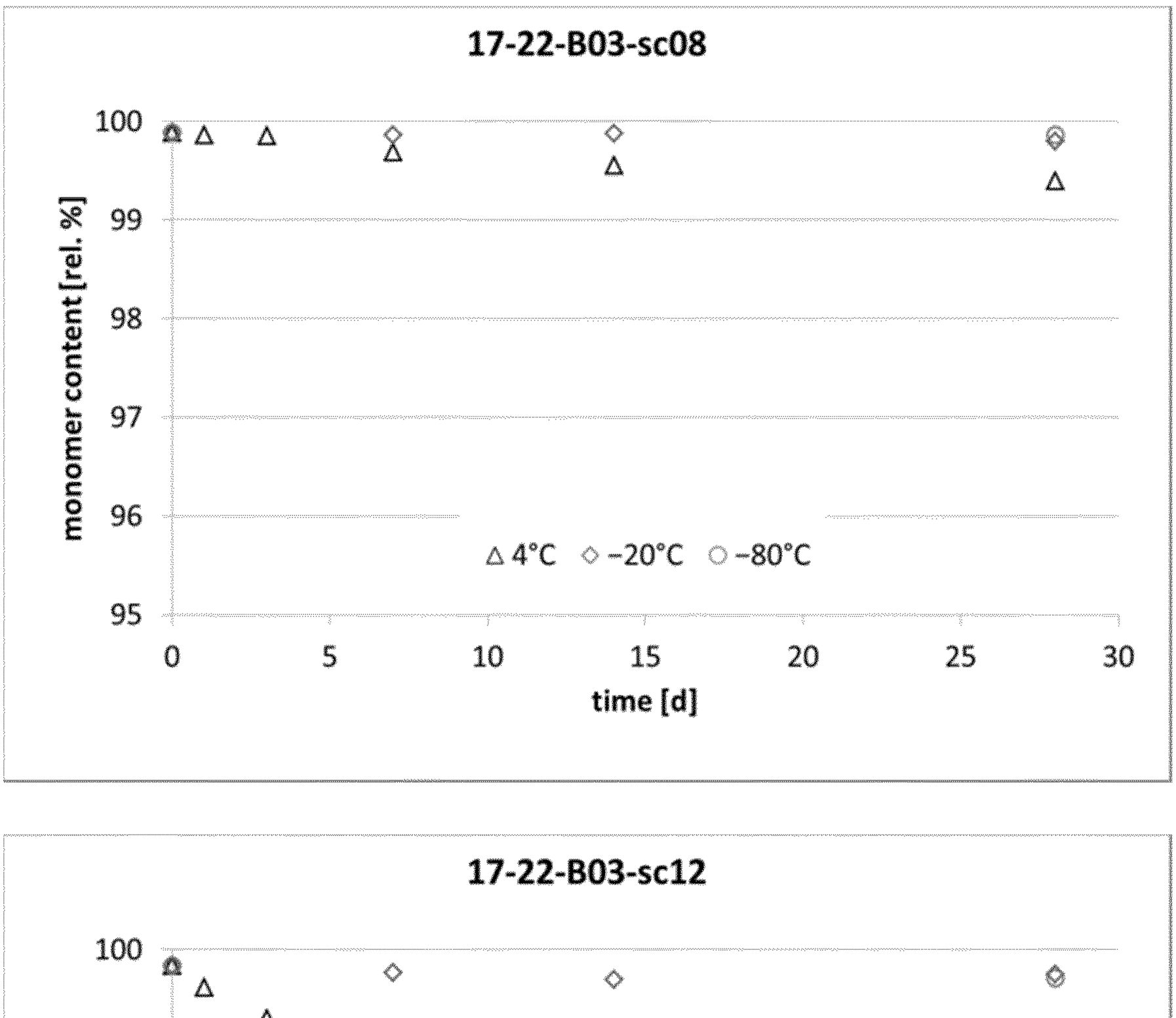
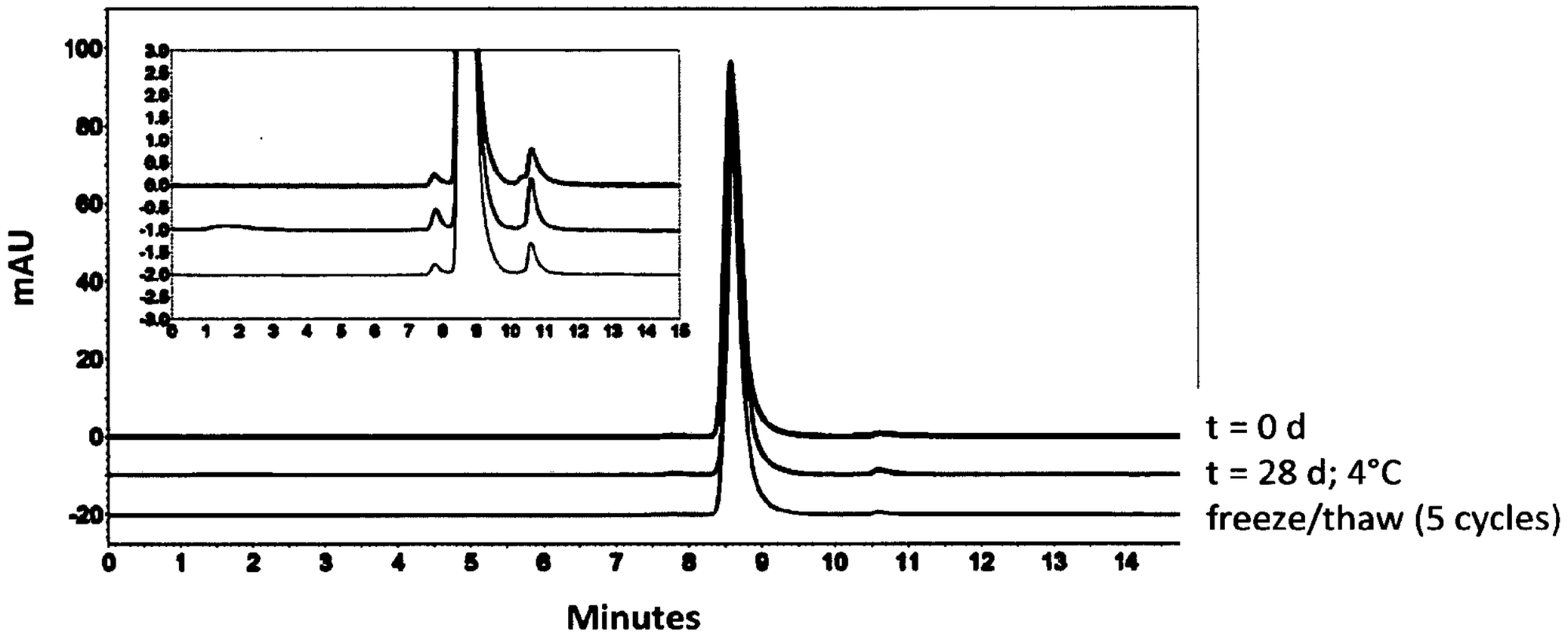


Figure 5


17-22-B03-sc02
mAU
Minutes
t = 0 d
t = 28 d; 4°C
freeze/thaw (5 cycles)

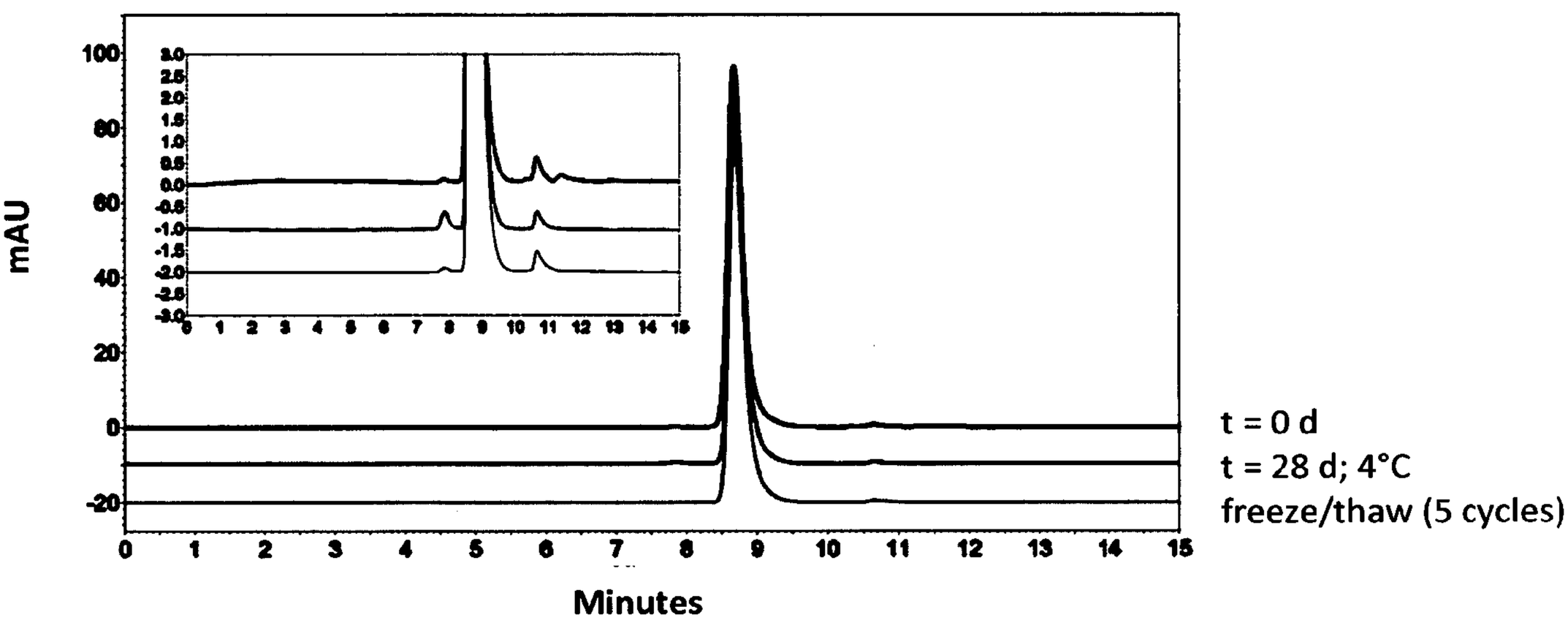

17-22-B03-sc08
mAU
Minutes
t = 0 d
t = 28 d; 4°C
freeze/thaw (5 cycles)

Figure 5 (continued)

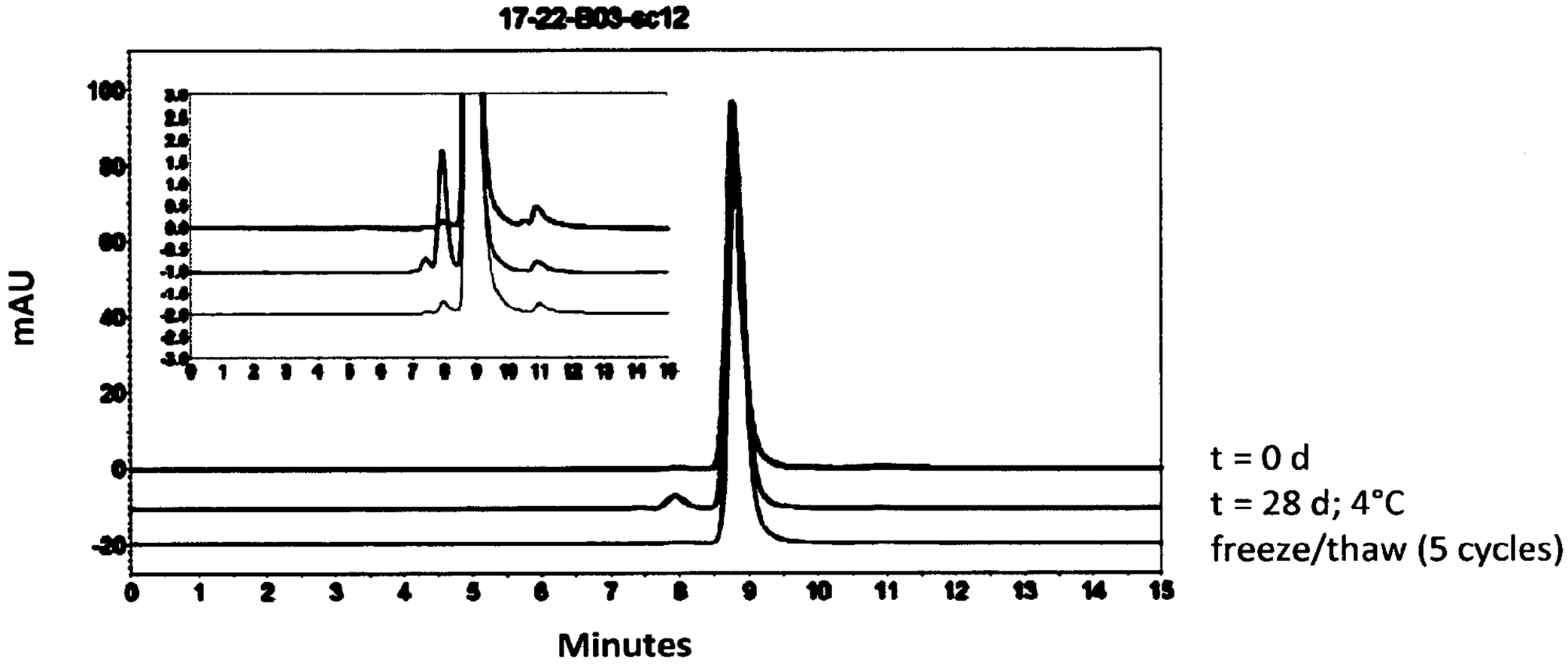


Figure 6

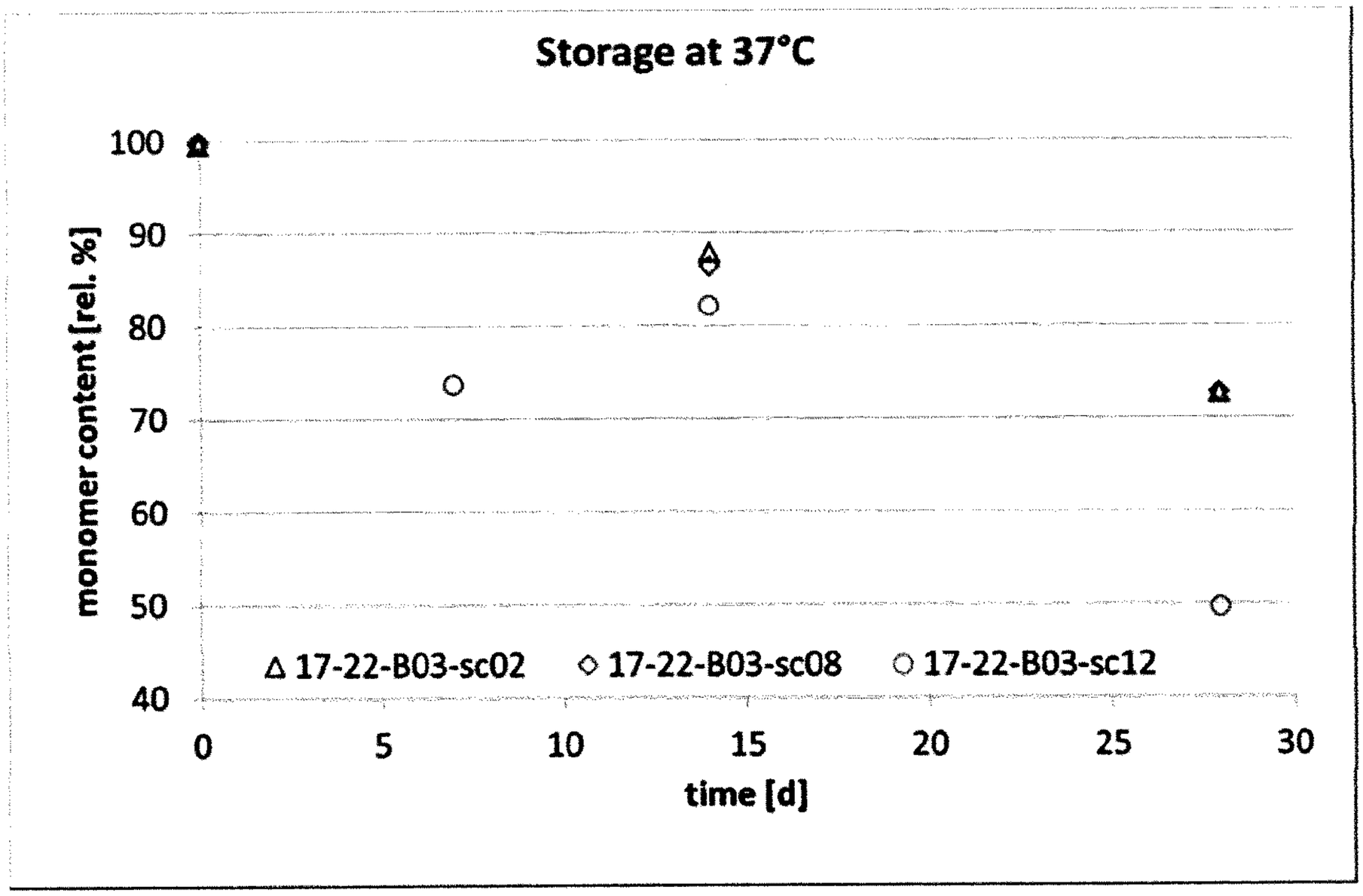
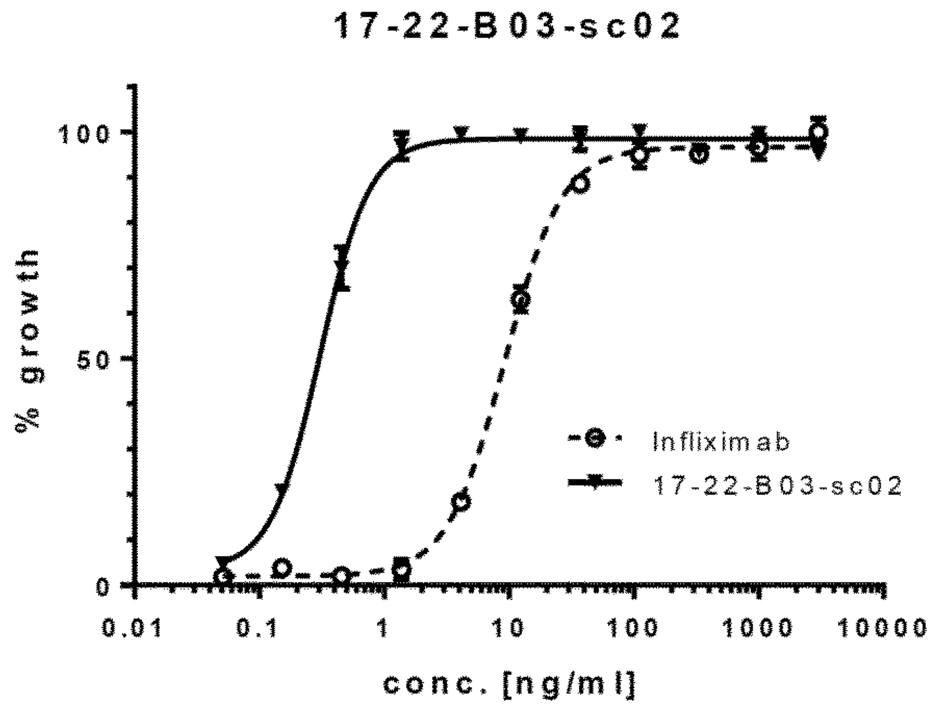
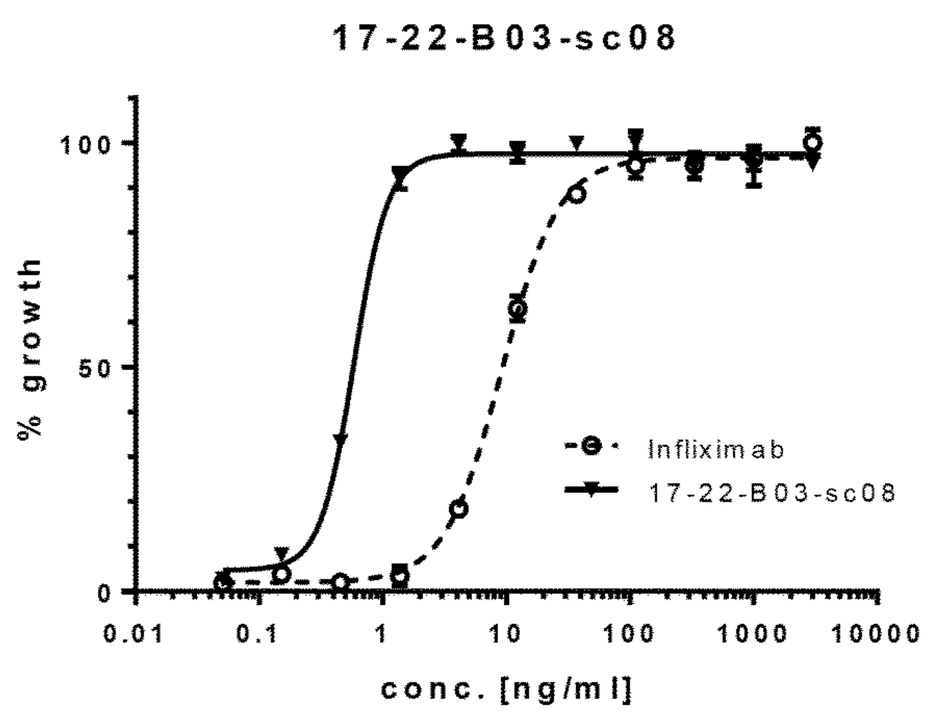
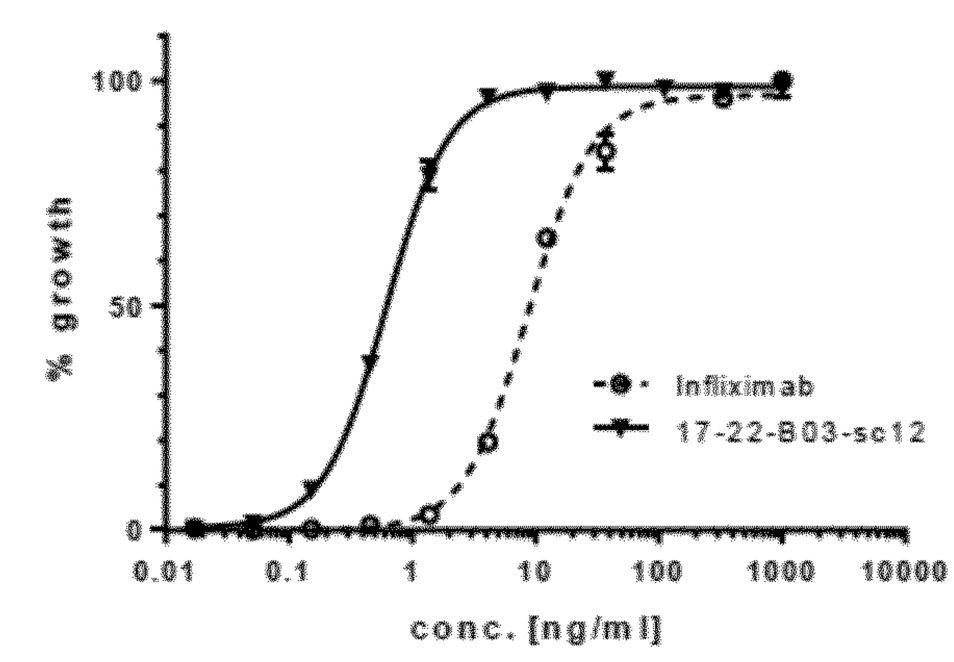

Storage at 37°C
monomer content [rel. %]
100
90
80
70
60
50
40
0
5
10
15
20
25
30
time [d]
Δ 17-22-B03-sc02
◇ 17-22-B03-sc08
○ 17-22-B03-sc12

Figure 7

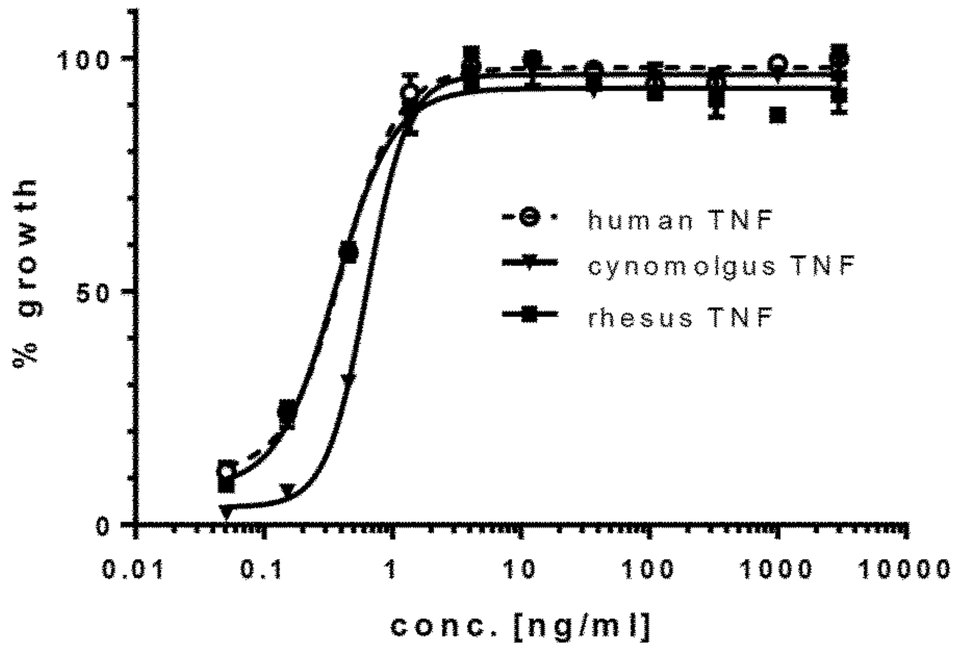


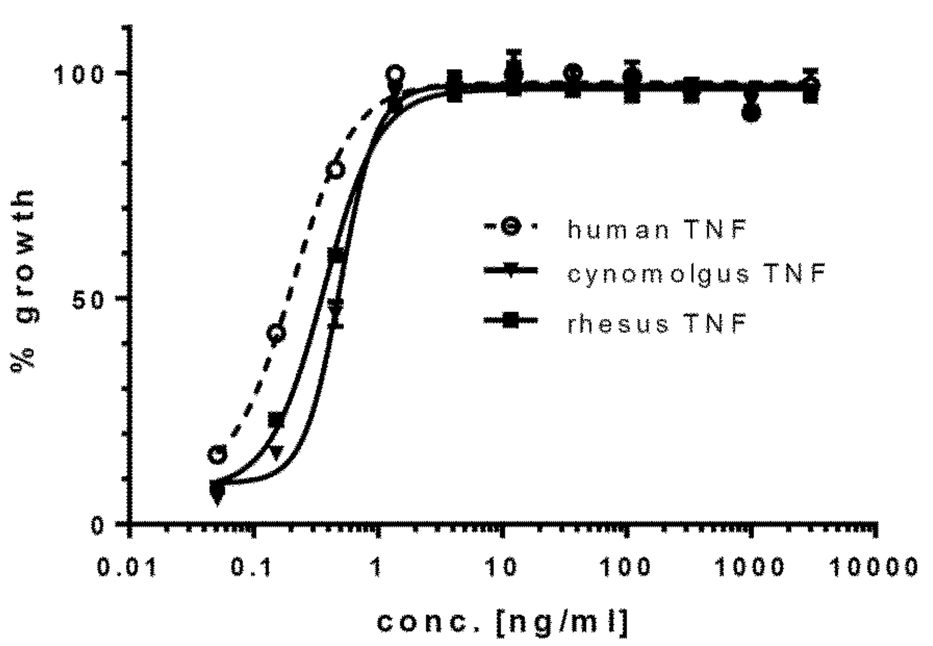




5

Figure 8





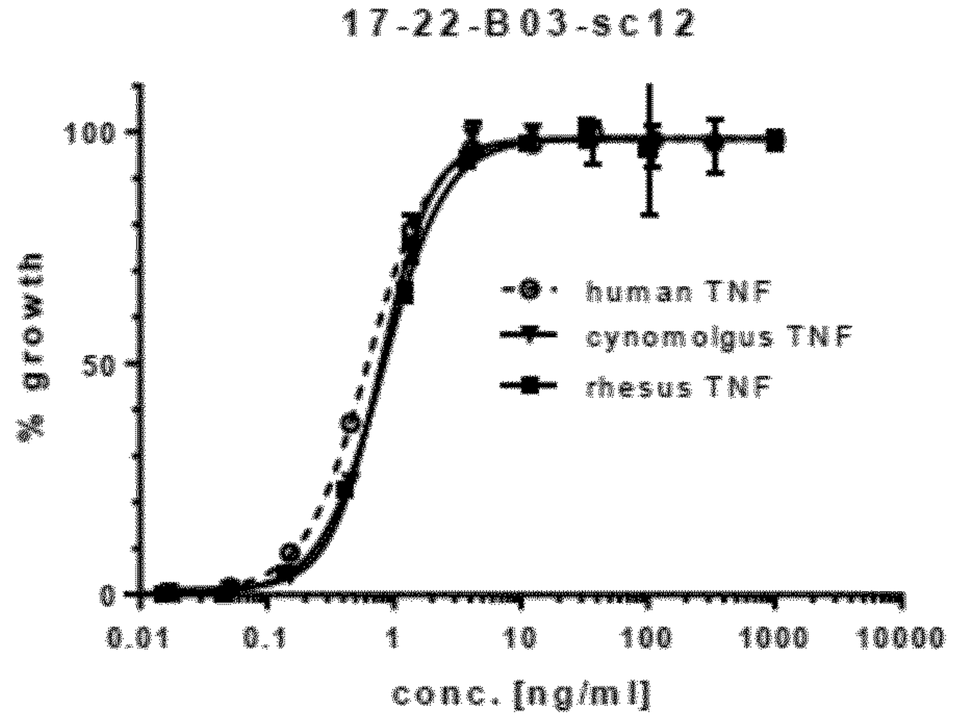
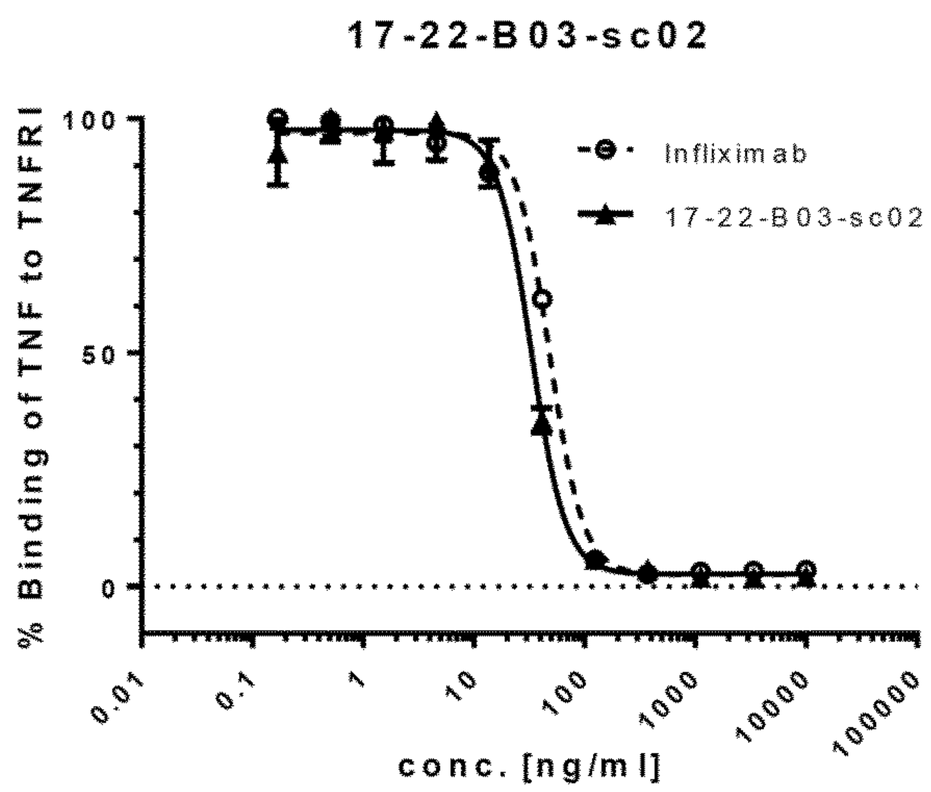
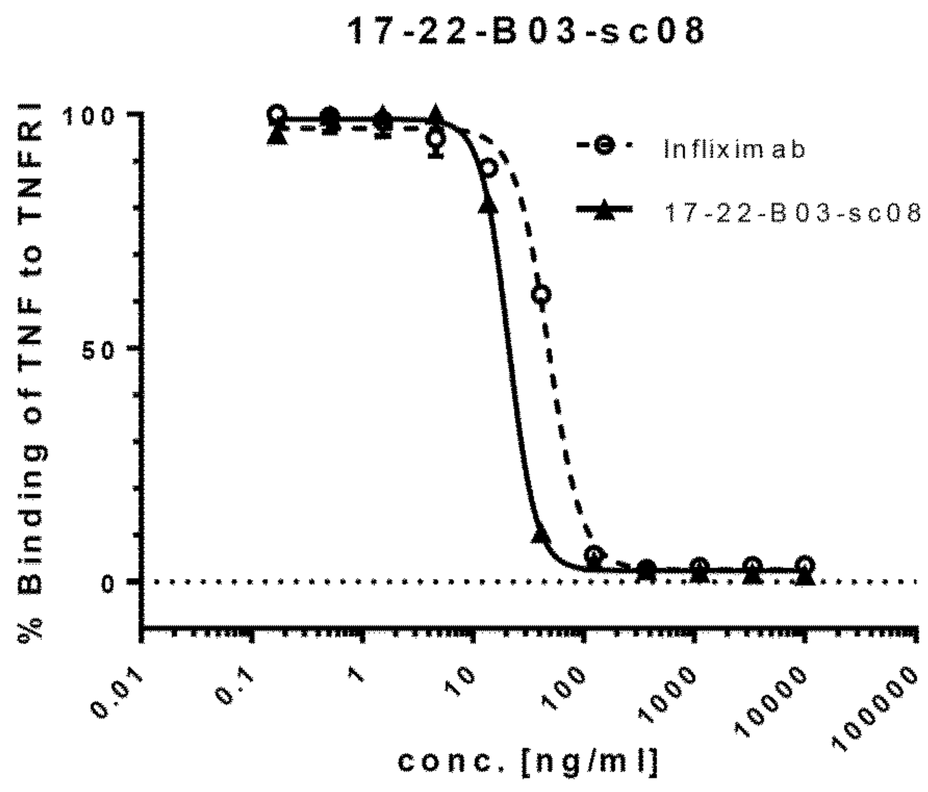

17-22-B03-sc12
% growth
100
50
0
0.01
0.1
1
10
100
1000
10000
conc. [ng/ml]
human TNF
cynomolgus TNF
rhesus TNF

Figure 9


17-22-B03-sc02
% Binding of TNF to TNFRI
100
50
0
0.01
0.1
1
10
100
1000
10000
100000
conc. [ng/ml]
Infliximab
17-22-B03-sc02


17-22-B03-sc08
% Binding of TNF to TNFRI
100
50
0
0.01
0.1
1
10
100
1000
10000
100000
conc. [ng/ml]
Infliximab
17-22-B03-sc08

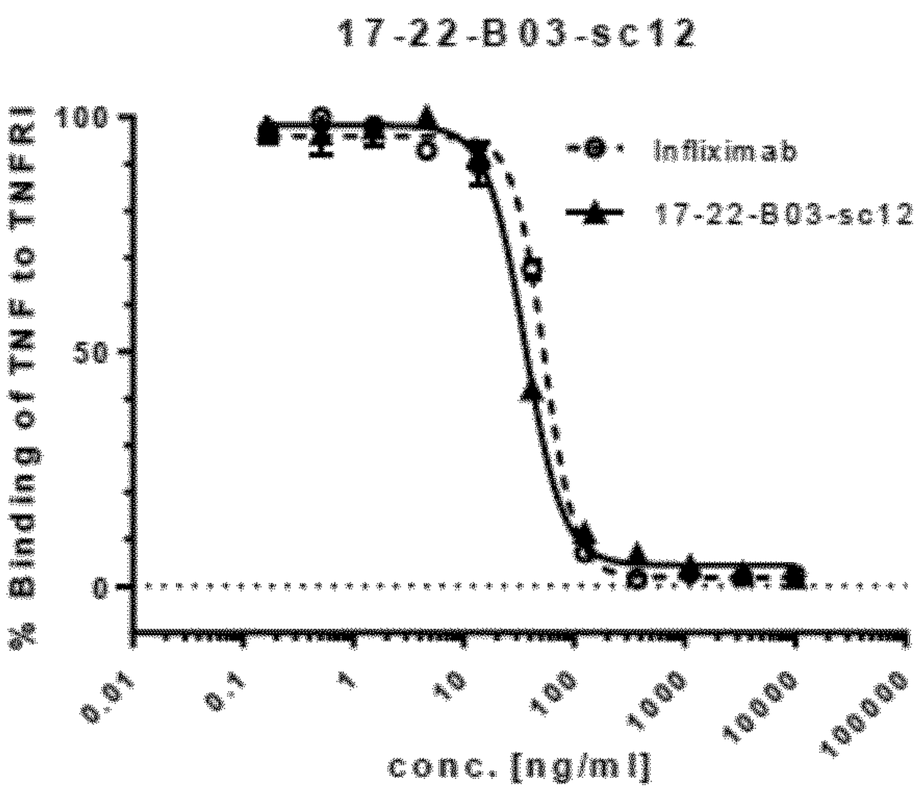
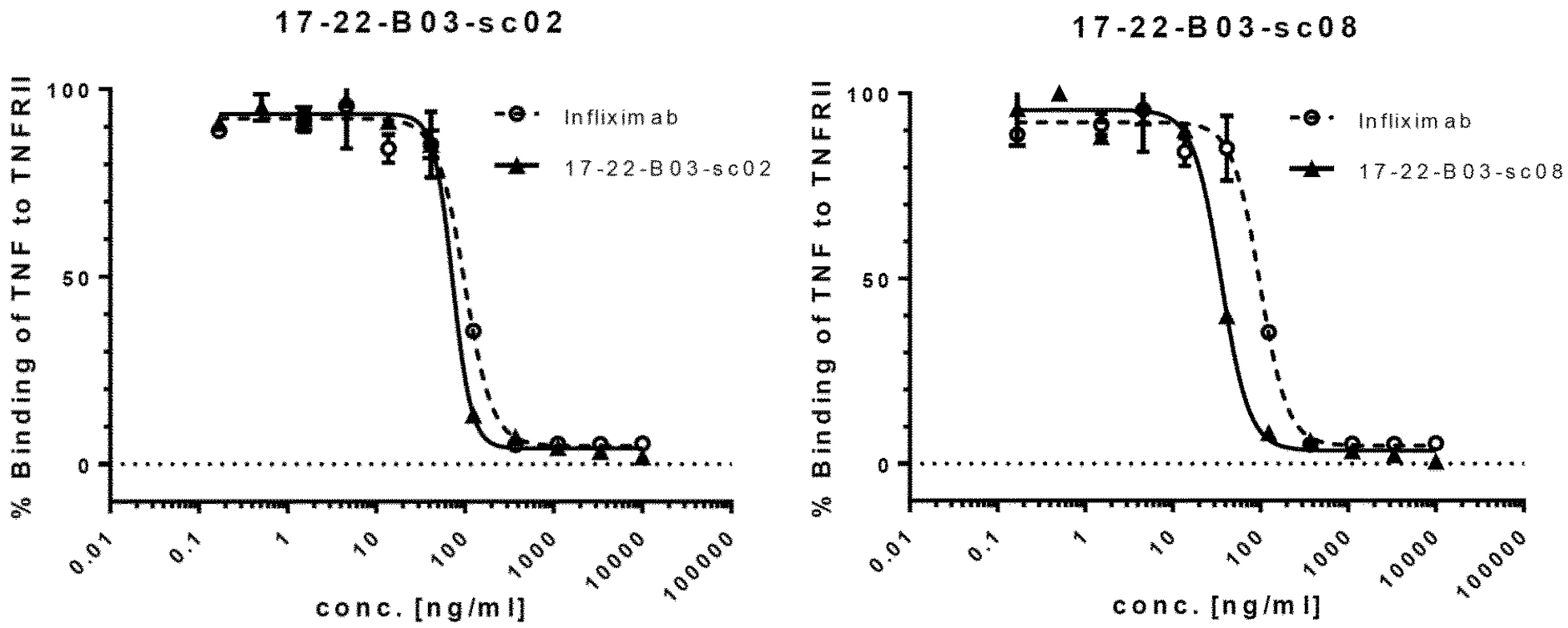

17-22-B03-sc12
% Binding of TNF to TNFRI
100
50
0
0.01
0.1
1
10
100
1000
10000
100000
conc. [ng/ml]
Infliximab
17-22-B03-sc12

Figure 10



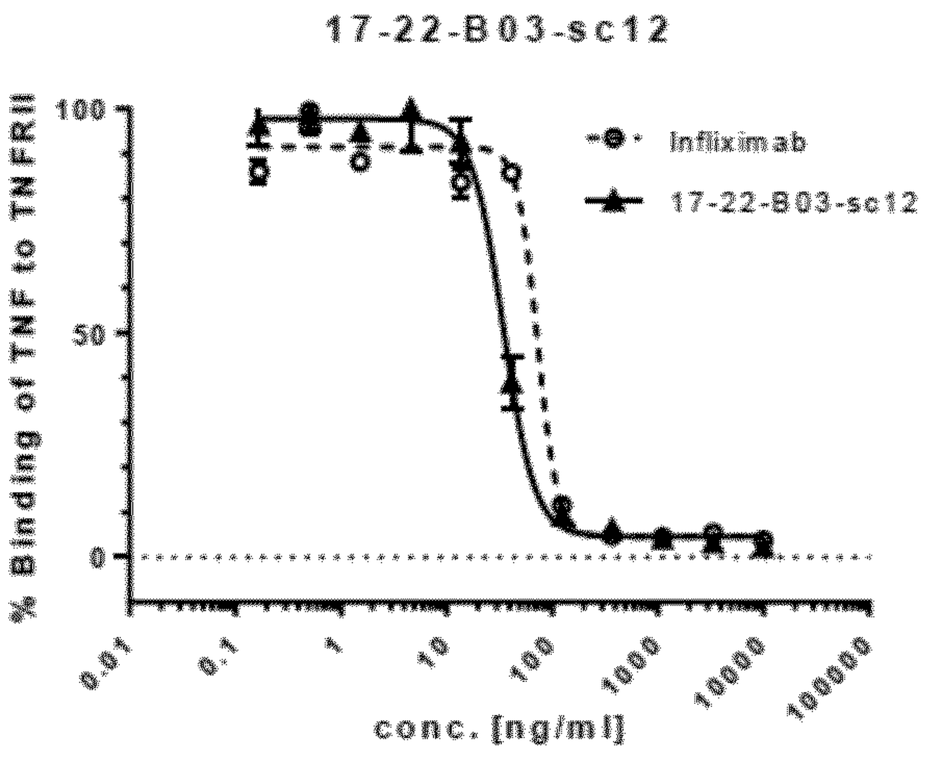
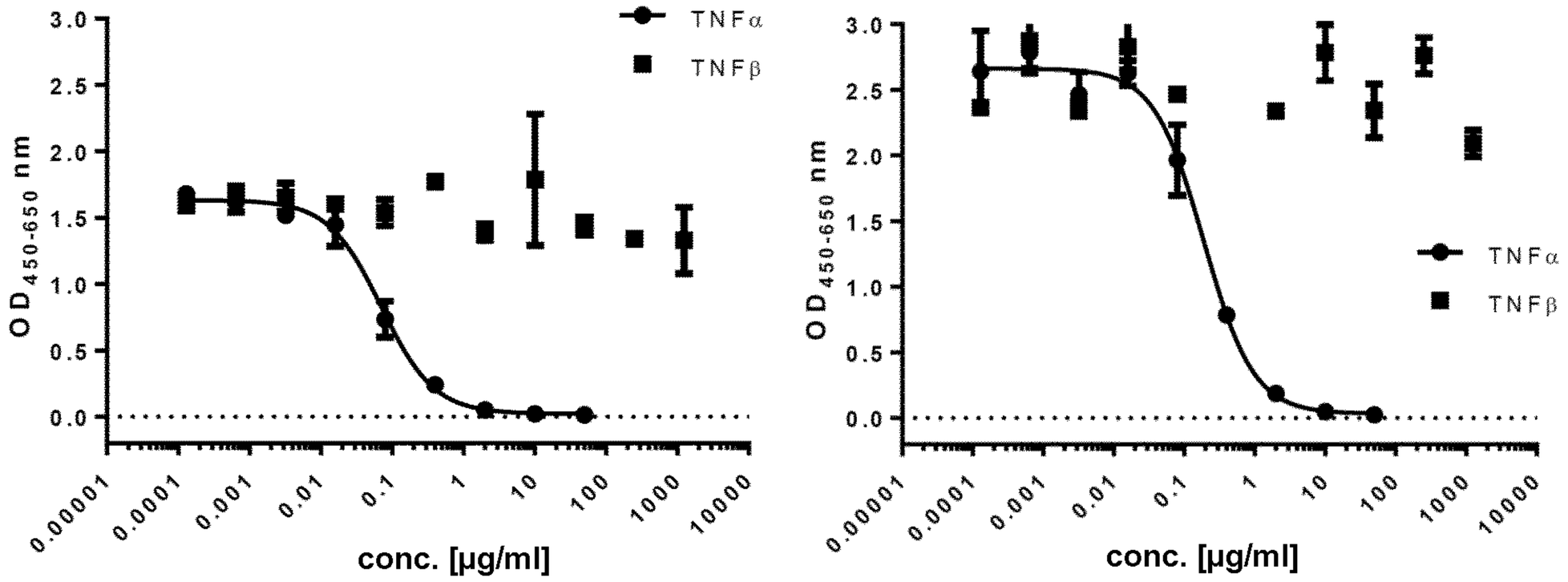


Figure 11



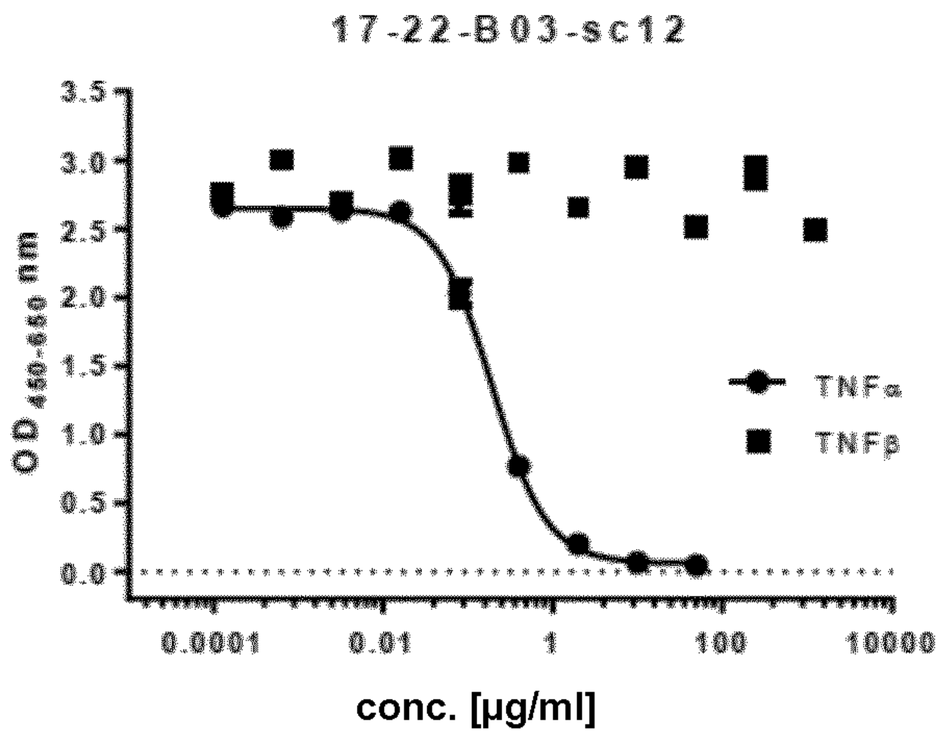
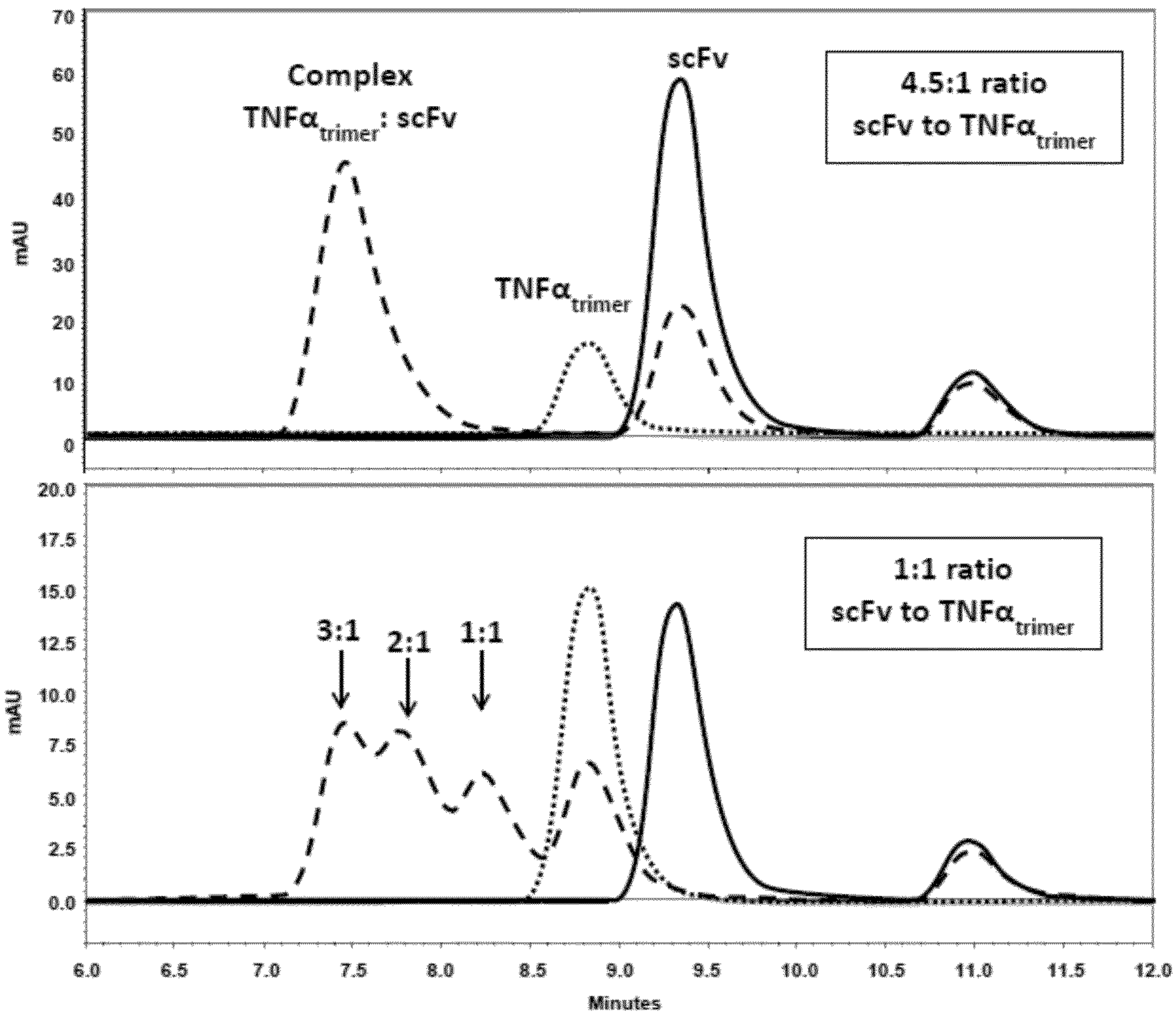

17-22-B03-sc12
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
OD 460-650 nm
TNFα
TNFβ
0.0001
0.01
1
100
10000
conc. [µg/ml]

Figure 12


70
60
50
40
30
20
10
0
mAU
Complex
TNFα trimer: scFv
TNFα trimer
scFv
4.5:1 ratio
scFv to TNFα trimer
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
mAU
3:1
2:1
1:1
1:1 ratio
scFv to TNFα trimer
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
10.5
11.0
11.5
12.0
Minutes