Fig. 1a



5 A B C

Fig. 1b



5 A B C

Fig. 2

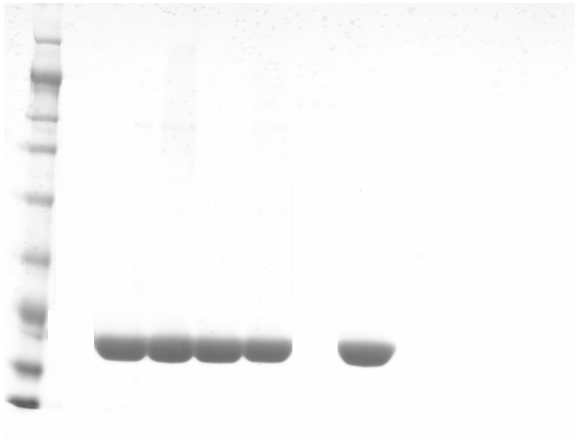


Fig. 3

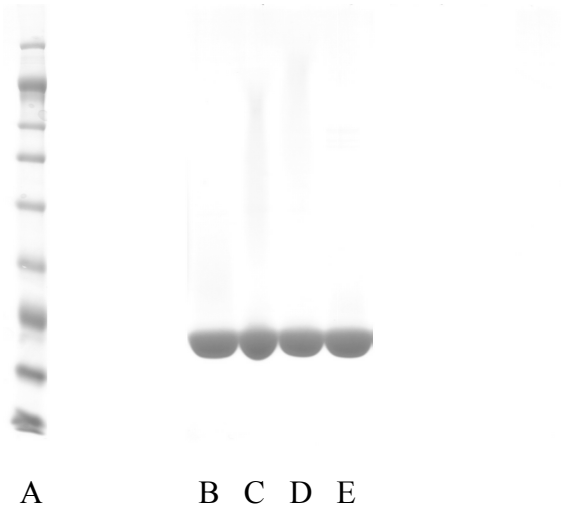


Fig. 4

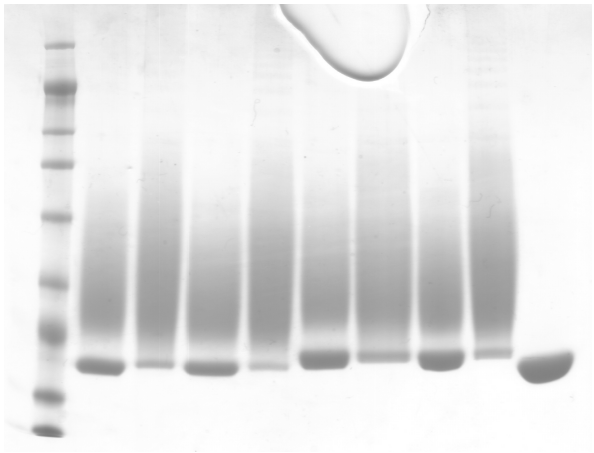


Fig. 5

5

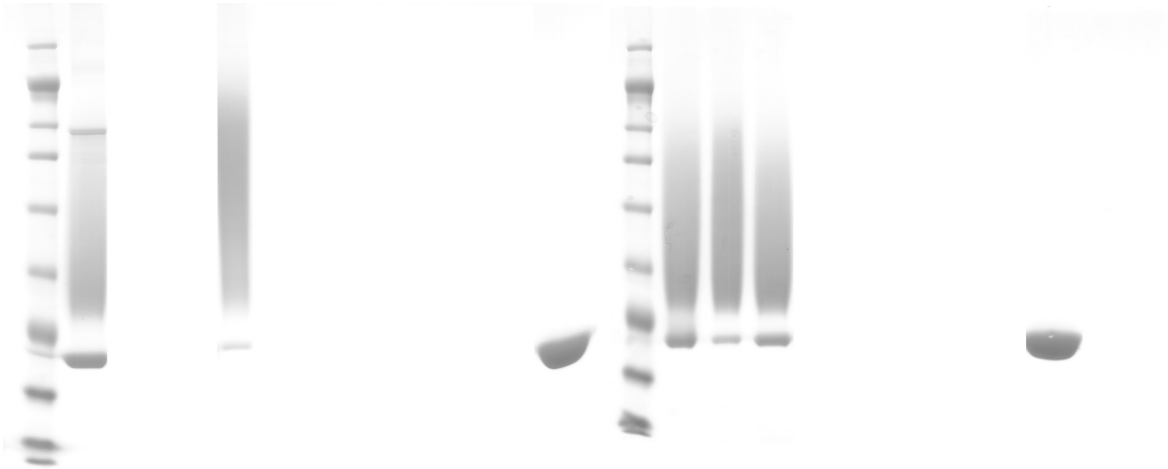


Fig. 6



Fig. 7

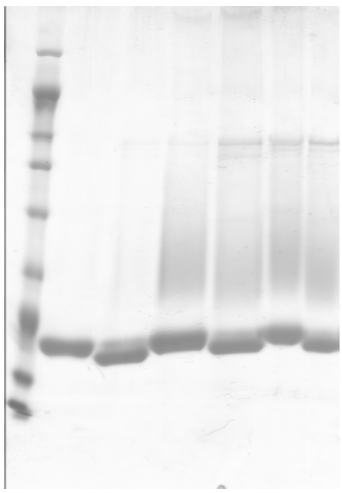


Fig. 8

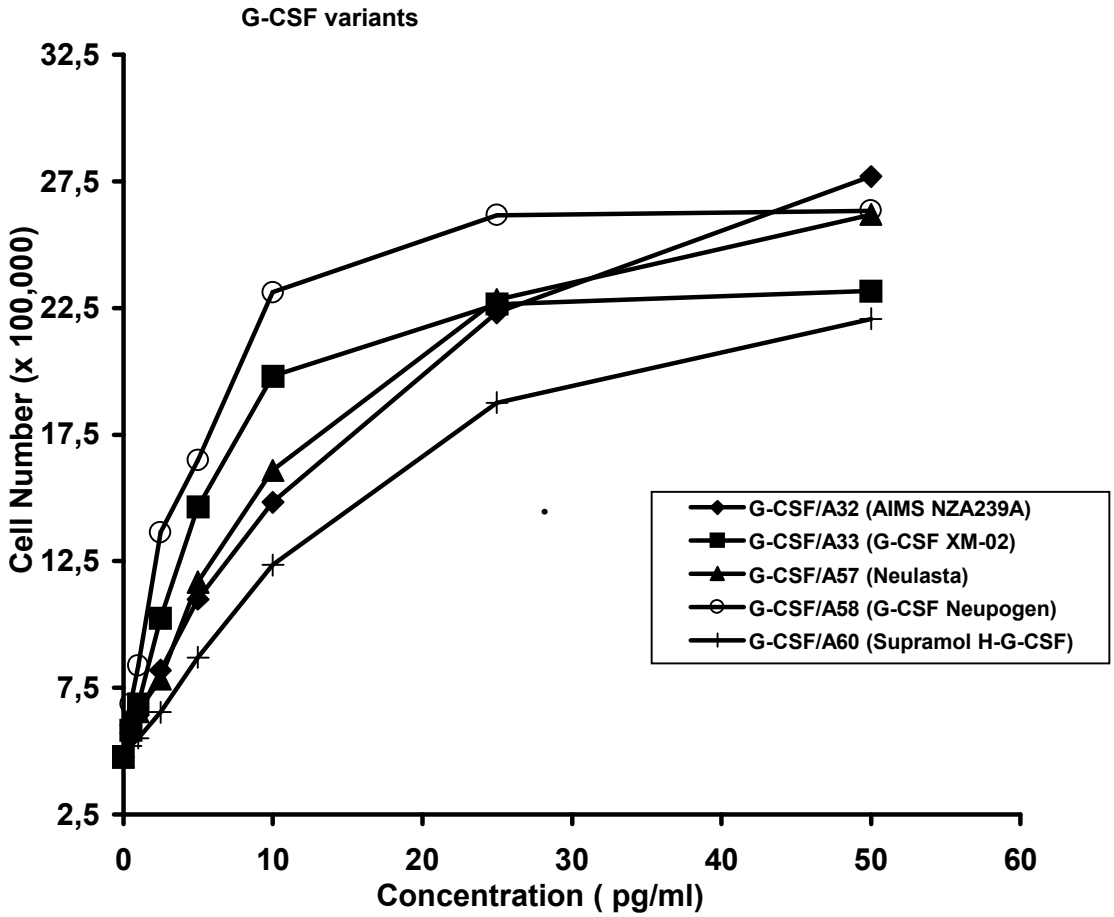

G-CSF variants
32,5
27,5
22,5
17,5
12,5
7,5
2,5
Cell Number (x 100,000)
0
10
20
30
40
50
60
Concentration (pg/ml)
G-CSF/A32 (AIMS NZA239A)
G-CSF/A33 (G-CSF XM-02)
G-CSF/A57 (Neulasta)
G-CSF/A58 (G-CSF Neupogen)
G-CSF/A60 (Supramol H-G-CSF)

Fig. 9

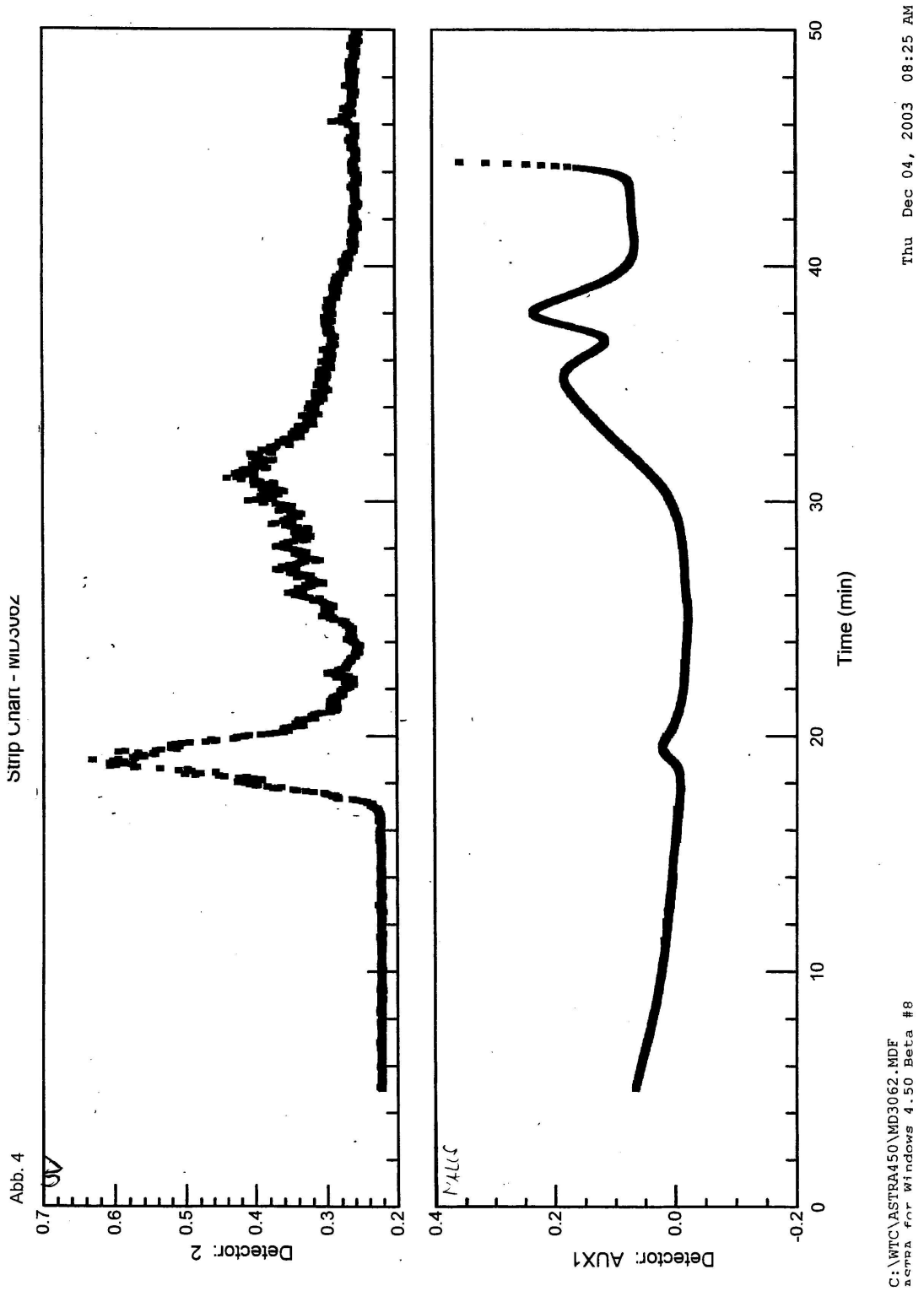

Abb. 4
Strip Chart - MD3062
Detector: 2
0.7
0.6
0.5
0.4
0.3
0.2
Detector: AUX1
0.4
0.2
0.0
-0.2
0
10
20
30
40
50
Time (min)
Thu Dec 04, 2003 08:25 AM
C:\WTC\ASTRA450\MD3062.MDF
astra for Windows 4.50 Beta #8

Fig. 10

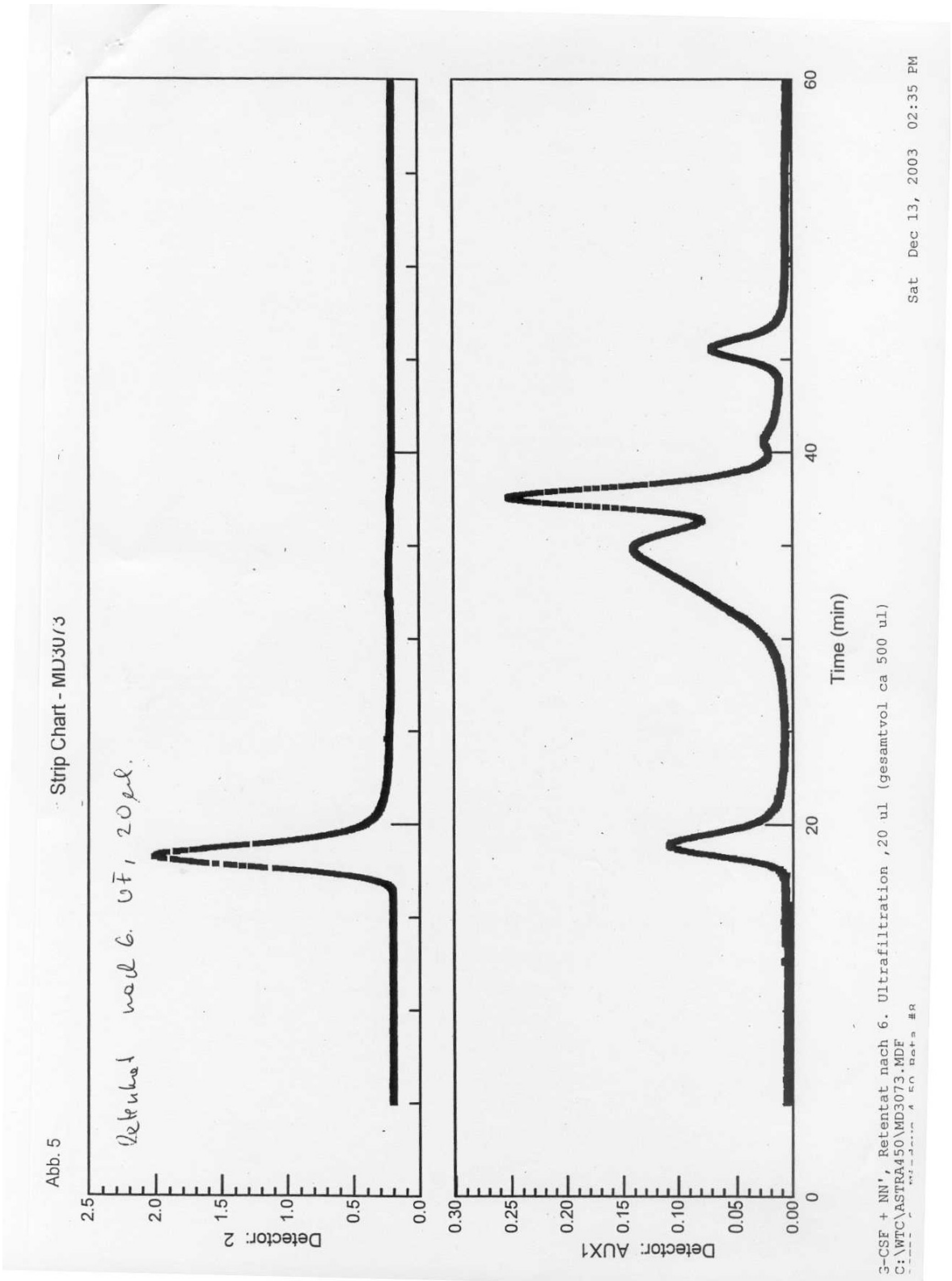

Abb. 5
Strip Chart - MD3073
Retentat nach 6. UF, 20µl.
Detector: 2
2.5
2.0
1.5
1.0
0.5
0.0
Detector: AUX1
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0
20
40
60
Time (min)
Sat Dec 13, 2003 02:35 PM
3-CSF + NN', Retentat nach 6. Ultrafiltration ,20 ul (gesamtvol ca 500 ul)
C:\WTC\ASTRA450\MD3073.MDF

Fig. 11

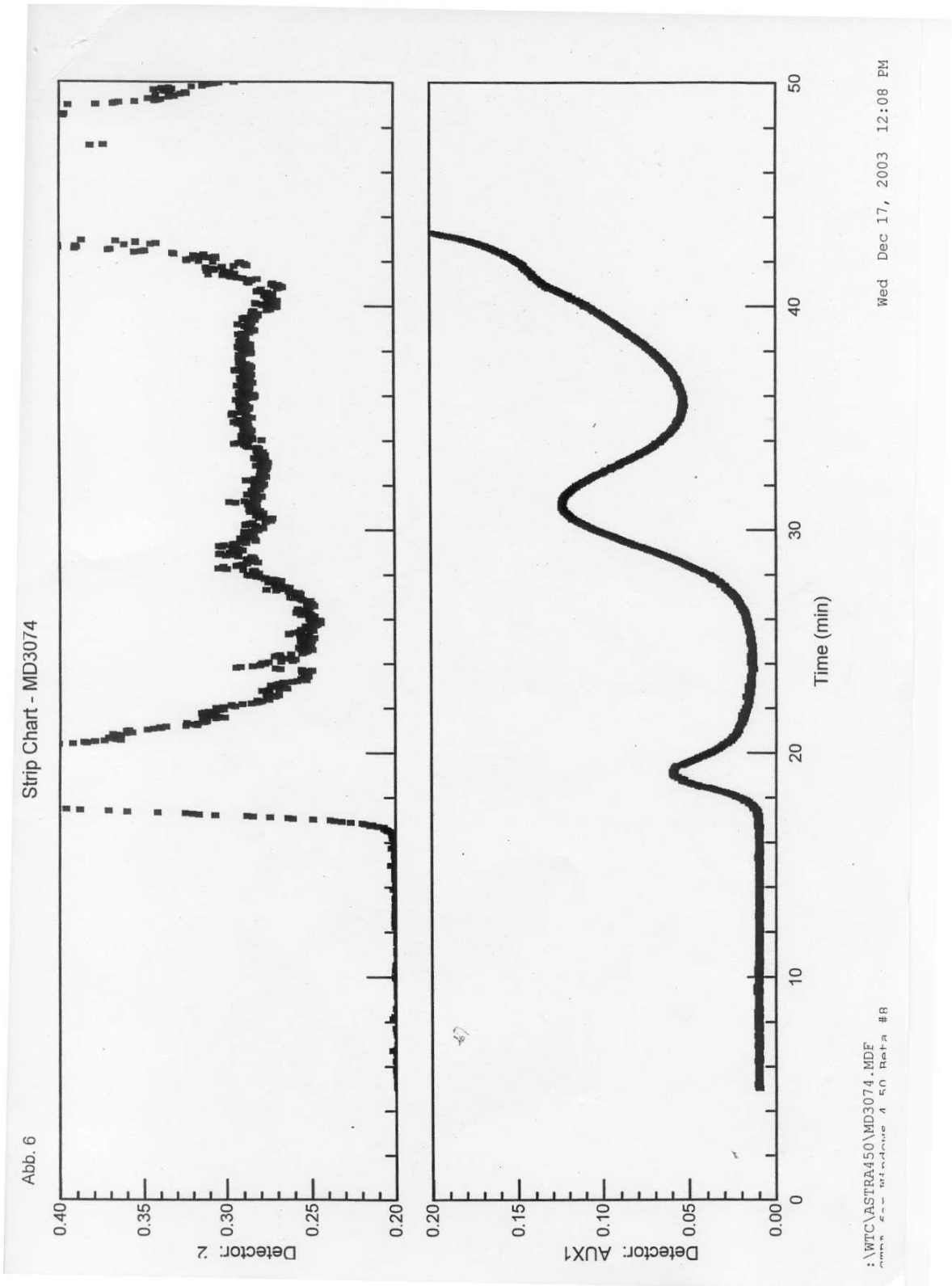

Abb. 6
Strip Chart - MD3074
Detector: 2
0.40
0.35
0.30
0.25
0.20
Detector: AUX1
0.20
0.15
0.10
0.05
0.00
0
10
20
30
40
50
Time (min)
Wed Dec 17, 2003 12:08 PM
:\WTC\ASTRA450\MD3074.MDF

Fig. 12

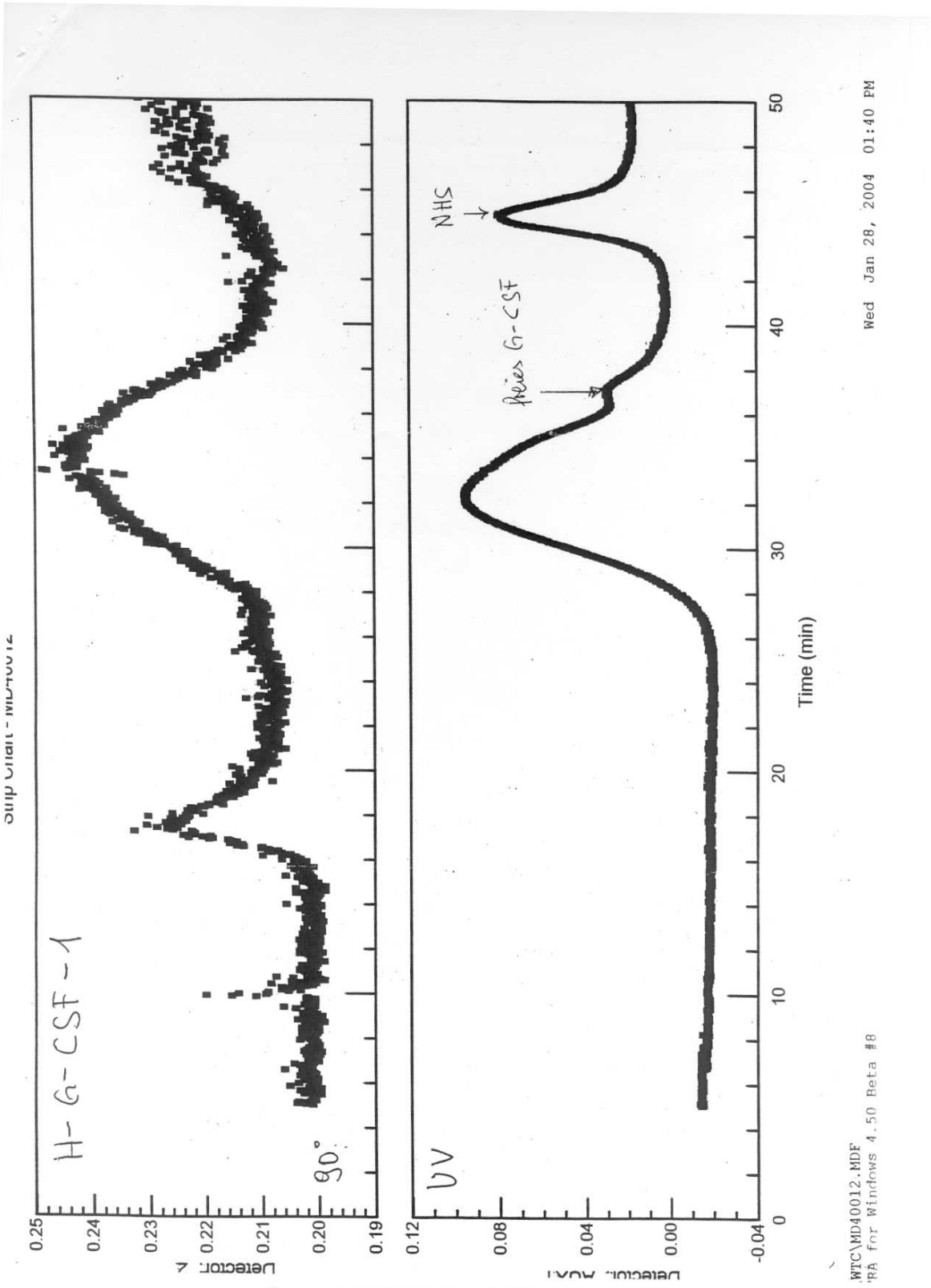


Fig. 13

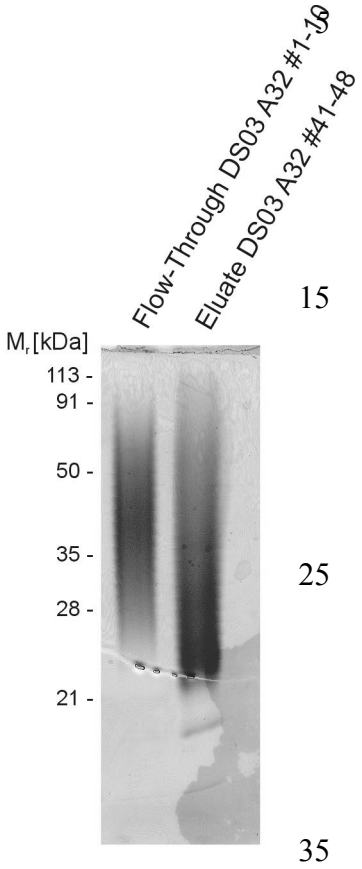

Flow-Through DS03 A32 #1-15
Eluate DS03 A32 #41-48
M$_r$ [kDa]
113 -
91 -
50 -
35 -
28 -
21 -
15
25
35

Fig. 14

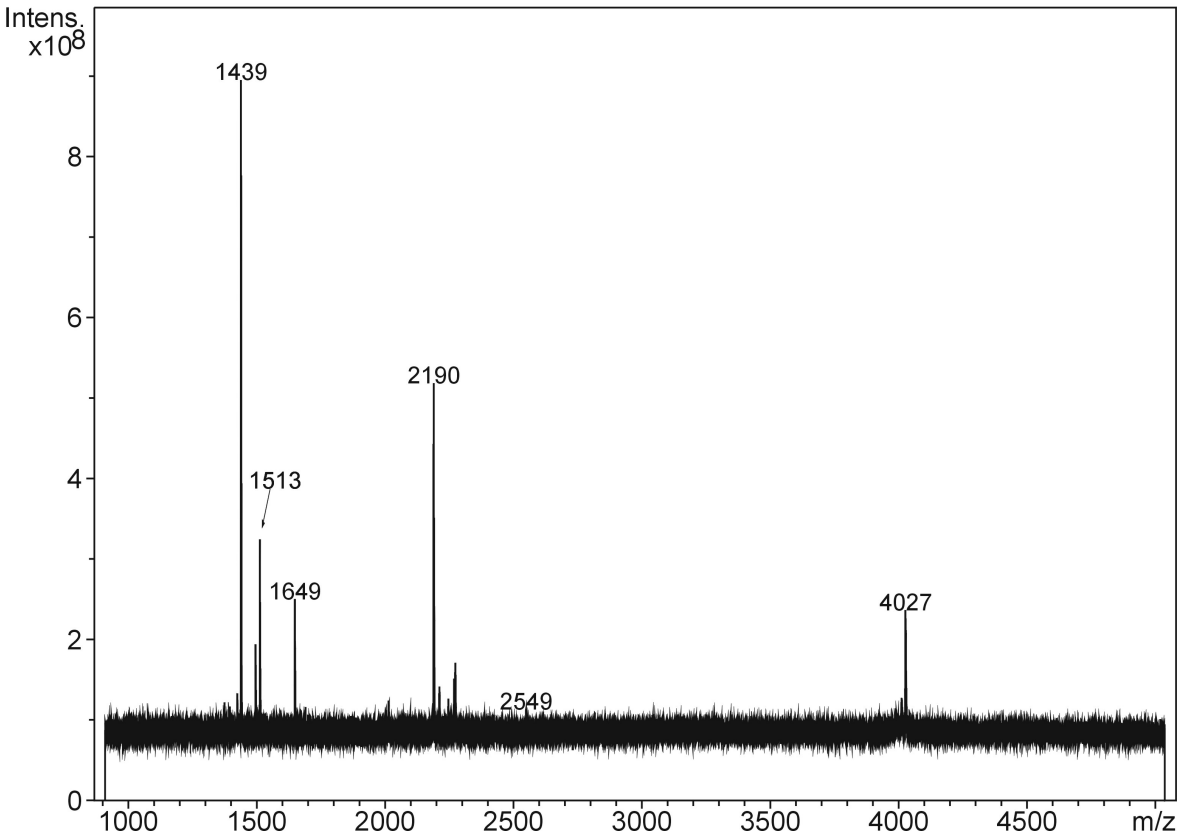

Intens.
x10^8
1439
2190
1513
1649
4027
2549
0
2
4
6
8
1000
1500
2000
2500
3000
3500
4000
4500
m/z

Fig. 15

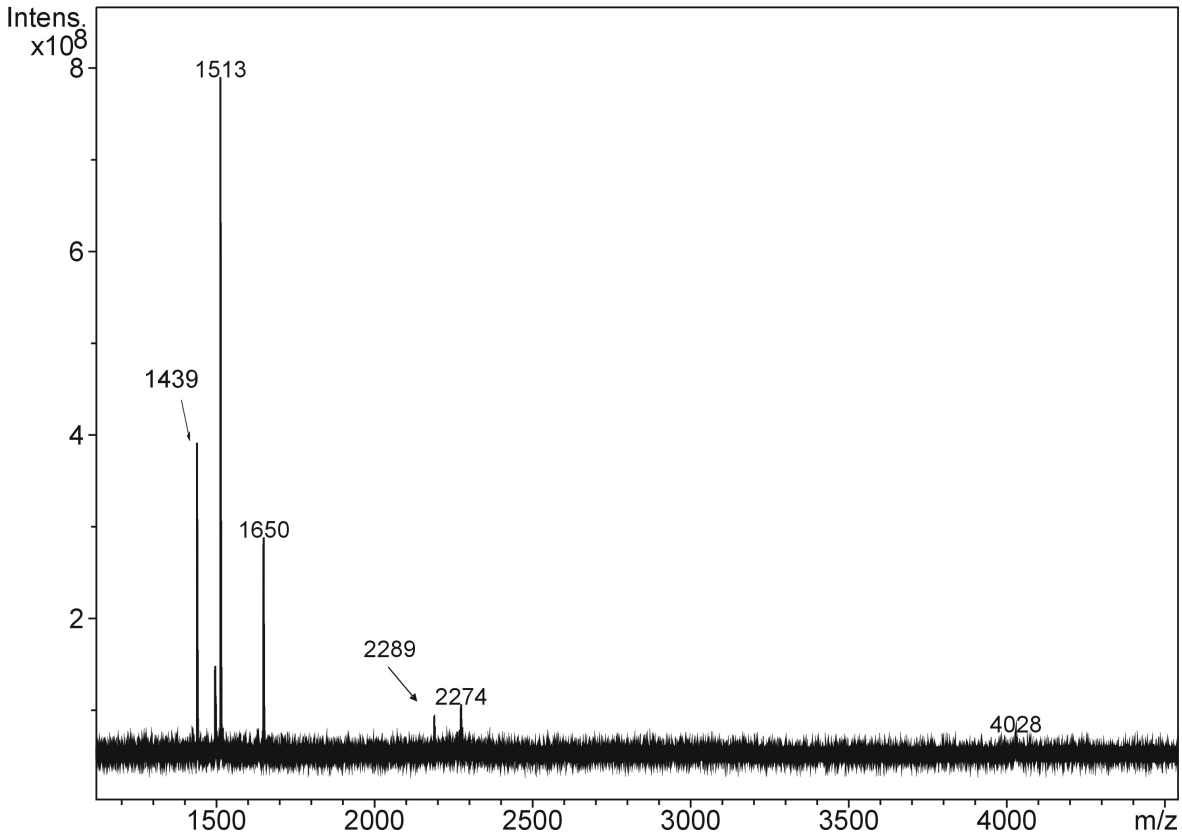

Intens.
x10^8
8
6
4
2
1513
1439
1650
2289
2274
4028
1500
2000
2500
3000
3500
4000
m/z

Fig. 16

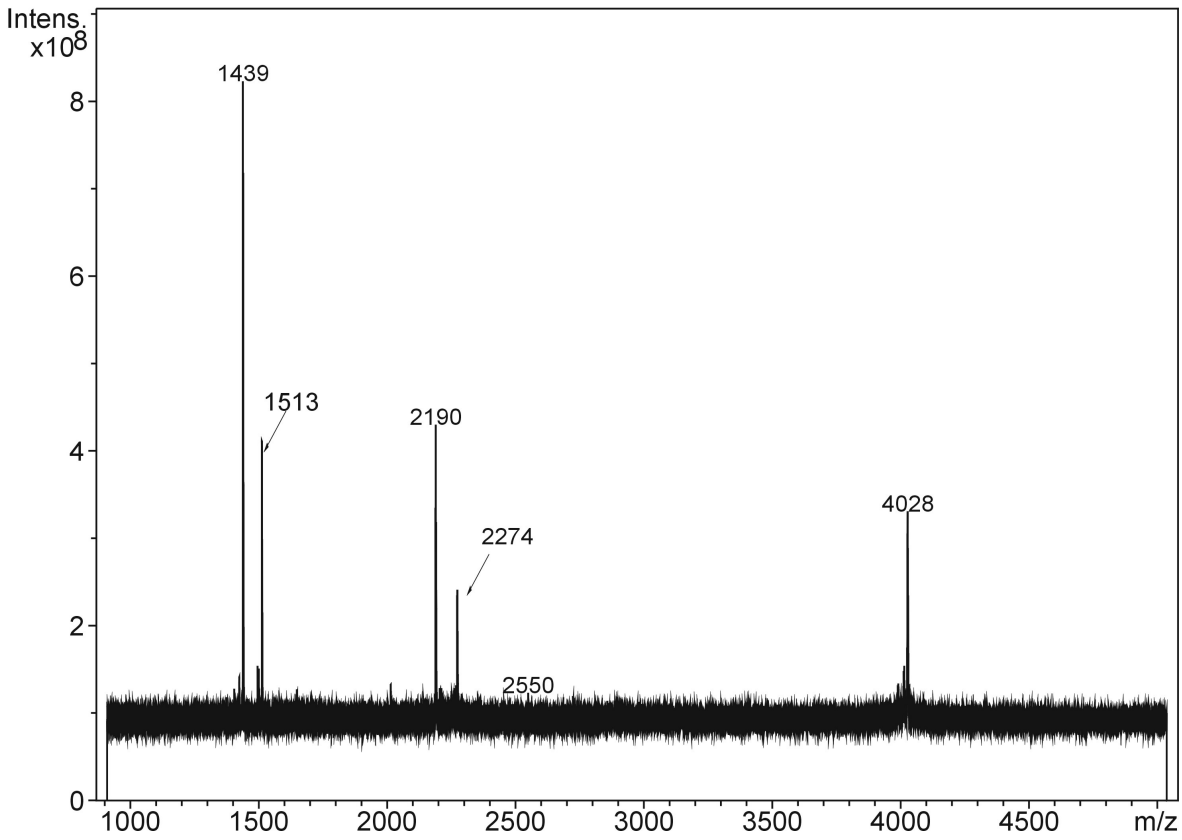
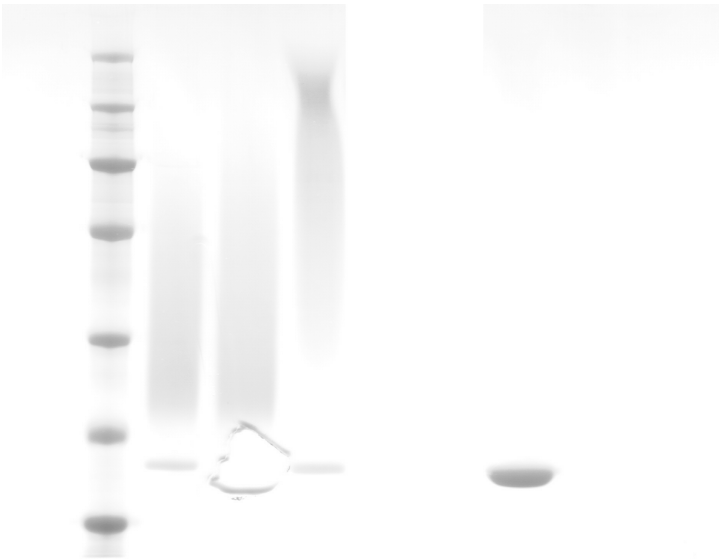
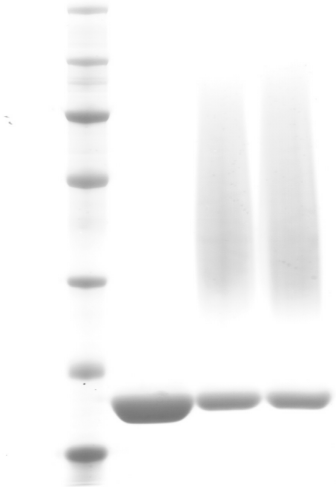

Intens.
x10^8
8
6
4
2
0
1439
1513
2190
2274
2550
4028
1000
1500
2000
2500
3000
3500
4000
4500
m/z

Fig. 17



Lane A B C D E

Fig. 18



Lane A B C D

Fig. 19

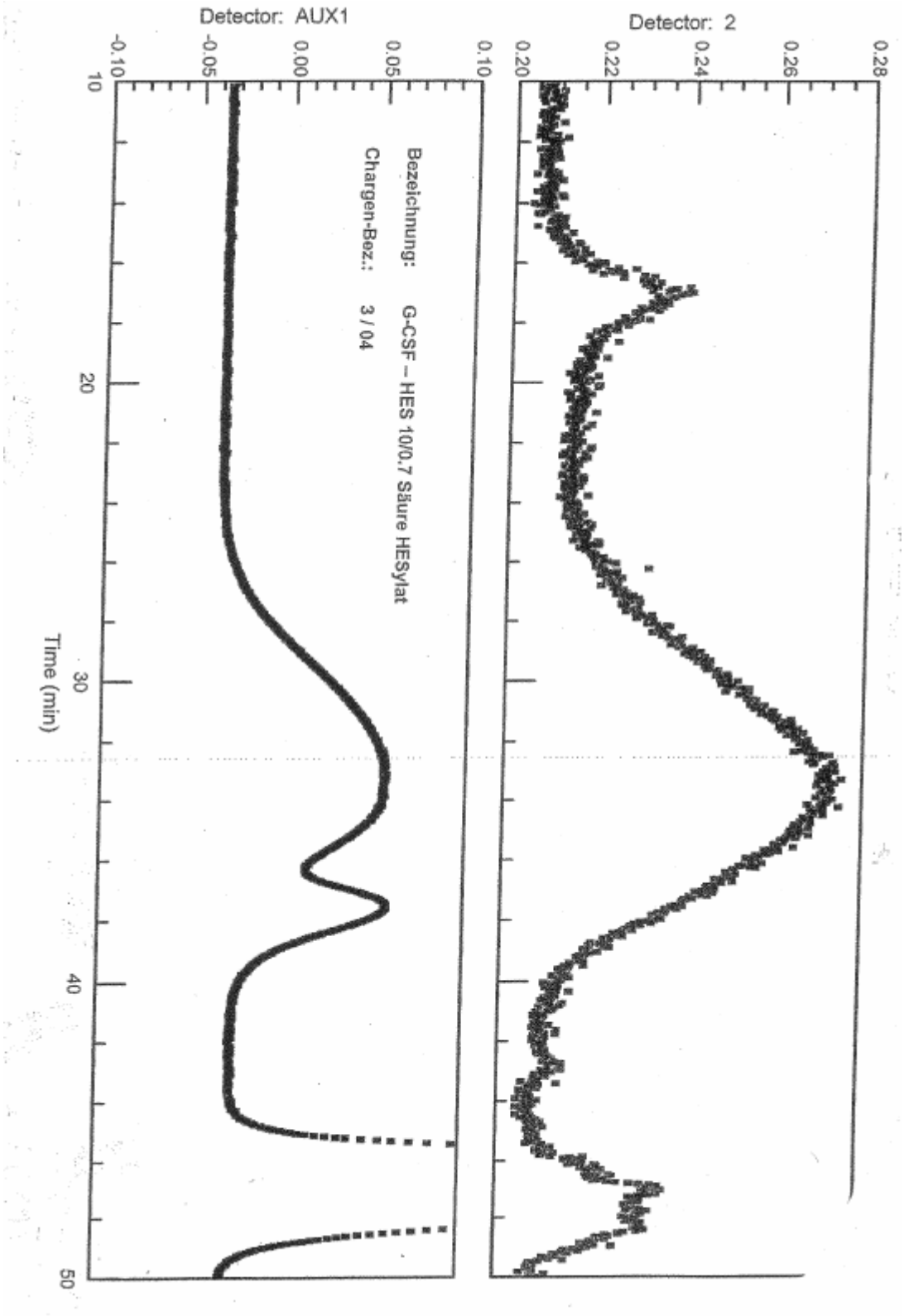

Detector: AUX1
Detector: 2
Bezeichnung: G-CSF – HES 10/0.7 Säure HESylat
Chargen-Bez.: 3 / 04
Time (min)

Fig. 20

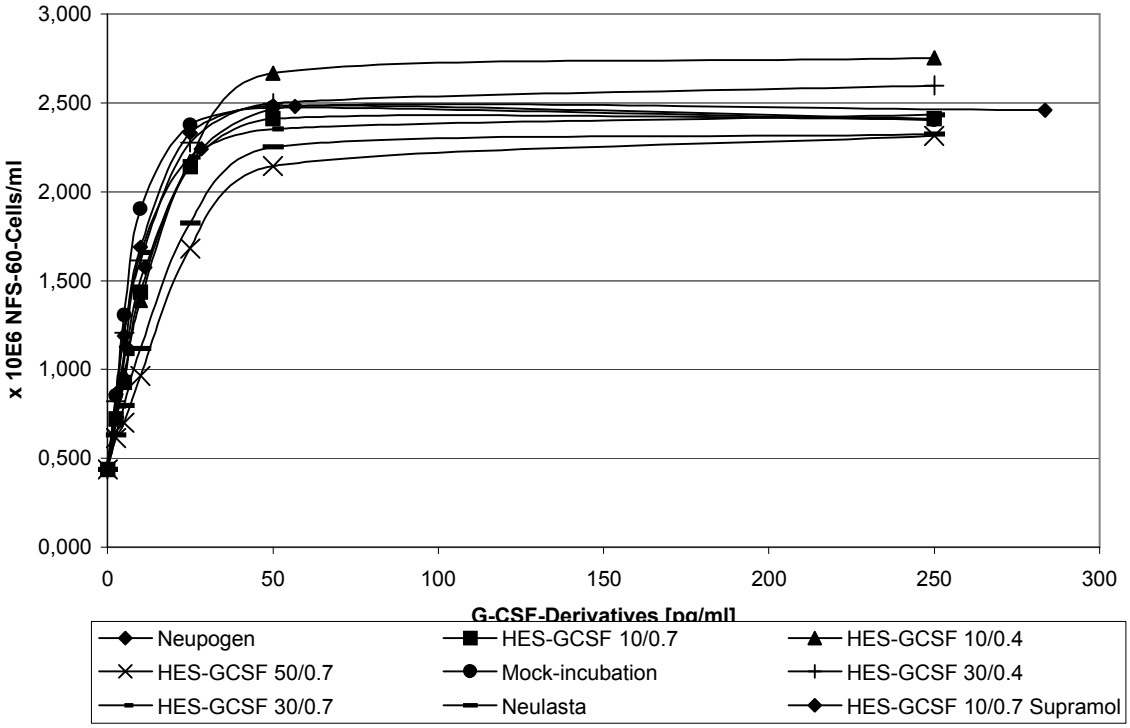
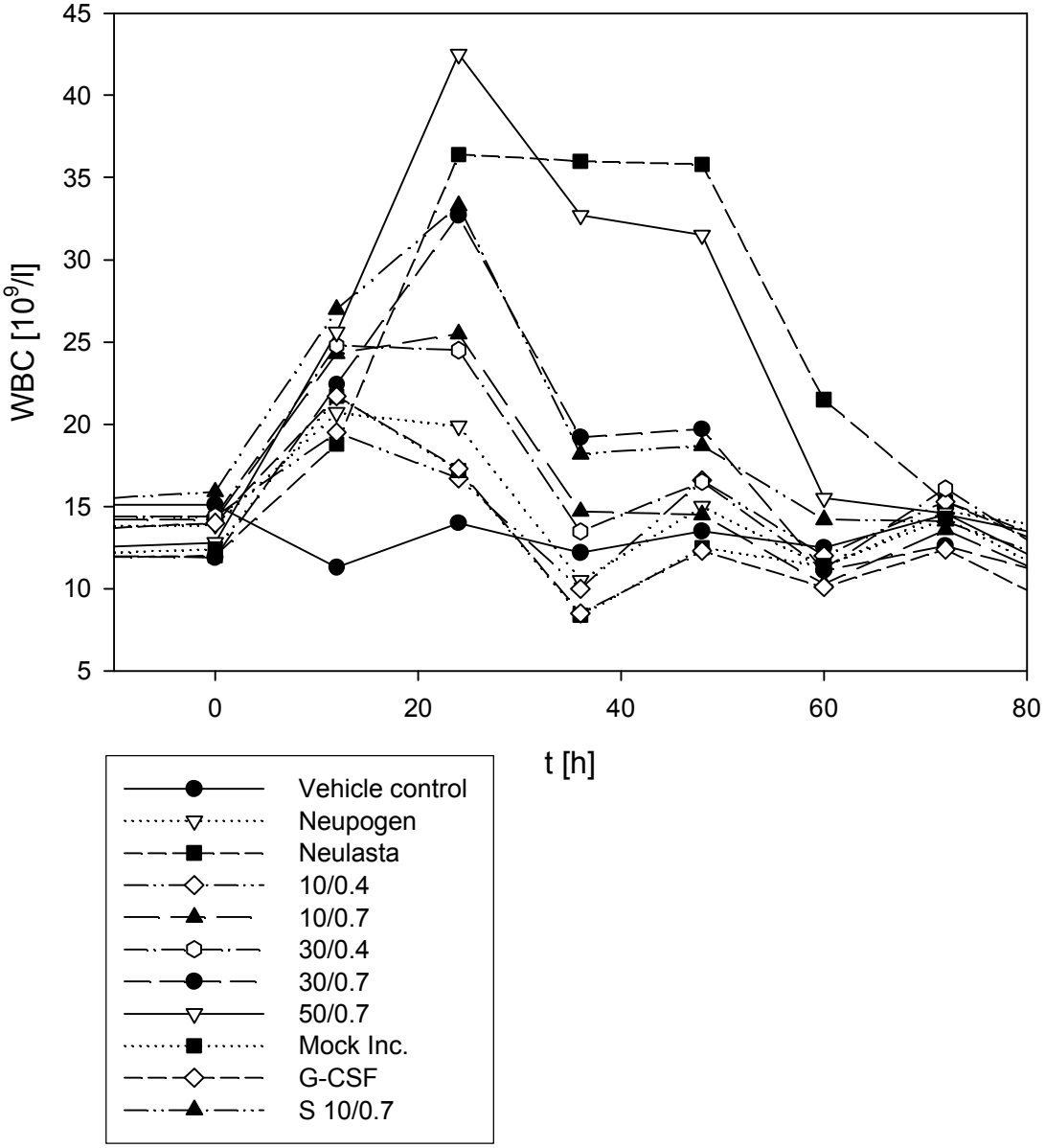

3,000
2,500
2,000
1,500
1,000
0,500
0,000
x 10E6 NFS-60-Cells/ml
0
50
100
150
200
250
300
G-CSF-Derivatives [pg/ml]
Neupogen
HES-GCSF 10/0.7
HES-GCSF 10/0.4
HES-GCSF 50/0.7
Mock-incubation
HES-GCSF 30/0.4
HES-GCSF 30/0.7
Neulasta
HES-GCSF 10/0.7 Supramol

Fig. 21


WBC [10^9/l]
t [h]
Vehicle control
Neupogen
Neulasta
10/0.4
10/0.7
30/0.4
30/0.7
50/0.7
Mock Inc.
G-CSF
S 10/0.7