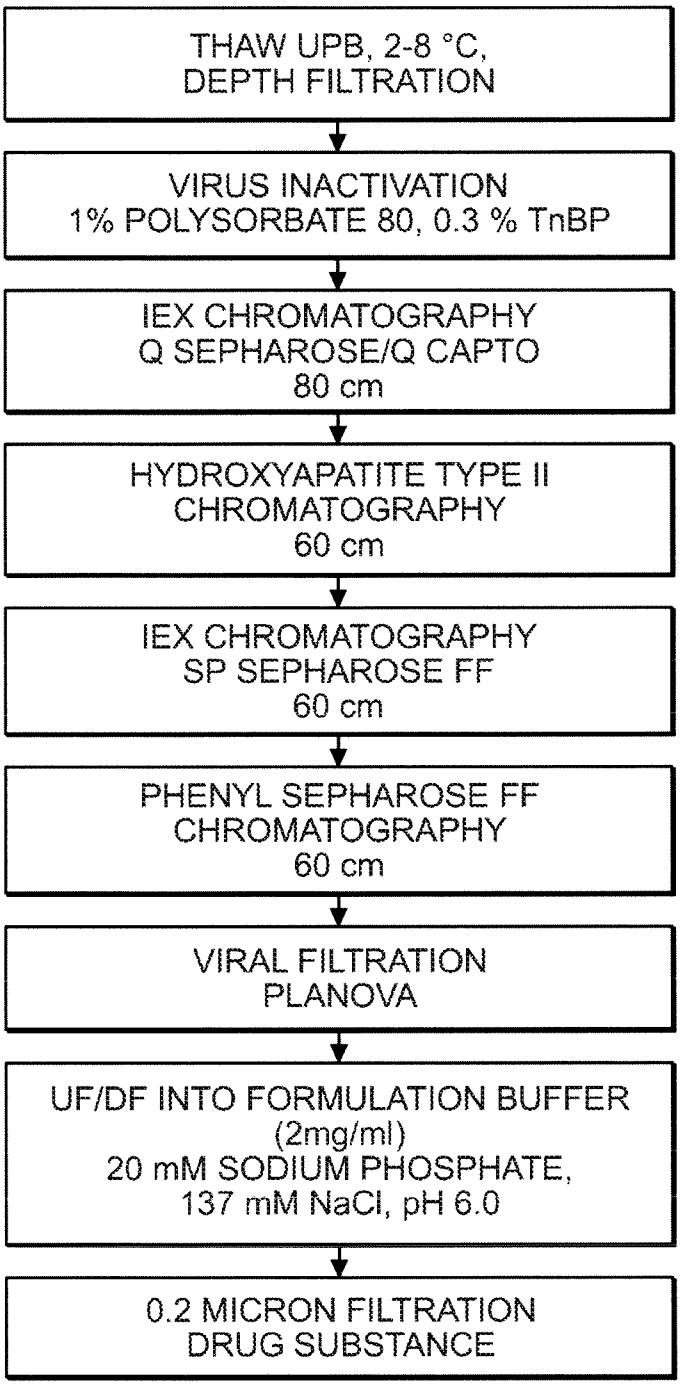

THAW UPB, 2-8 °C,
DEPTH FILTRATION
VIRUS INACTIVATION
1% POLYSORBATE 80, 0.3 % TnBP
IEX CHROMATOGRAPHY
Q SEPHAROSE/Q CAPTO
80 cm
HYDROXYAPATITE TYPE II
CHROMATOGRAPHY
60 cm
IEX CHROMATOGRAPHY
SP SEPHAROSE FF
60 cm
PHENYL SEPHAROSE FF
CHROMATOGRAPHY
60 cm
VIRAL FILTRATION
PLANOVA
UF/DF INTO FORMULATION BUFFER
(2mg/ml)
20 mM SODIUM PHOSPHATE,
137 mM NaCl, pH 6.0
0.2 MICRON FILTRATION
DRUG SUBSTANCE

FIG. 1

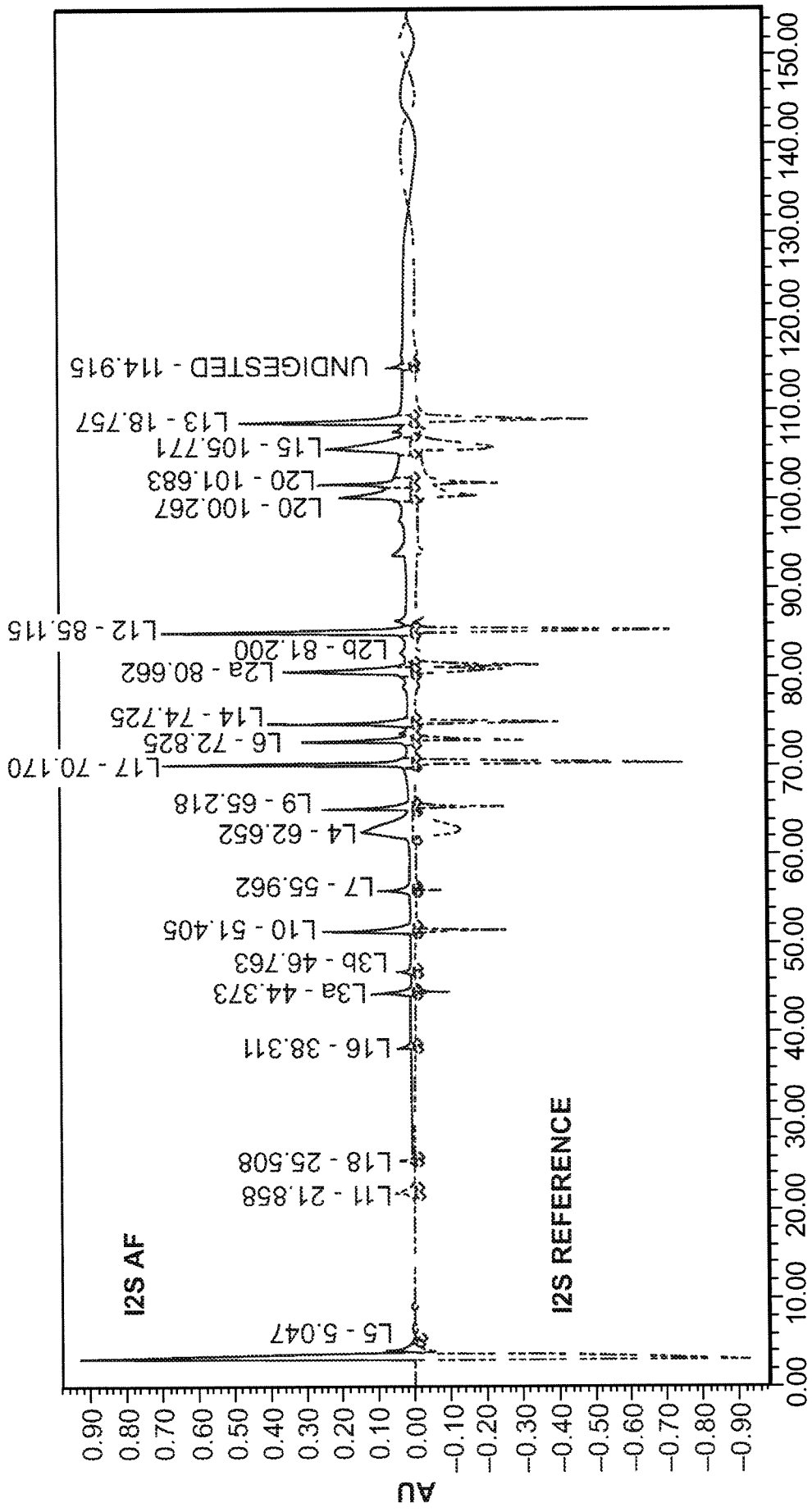
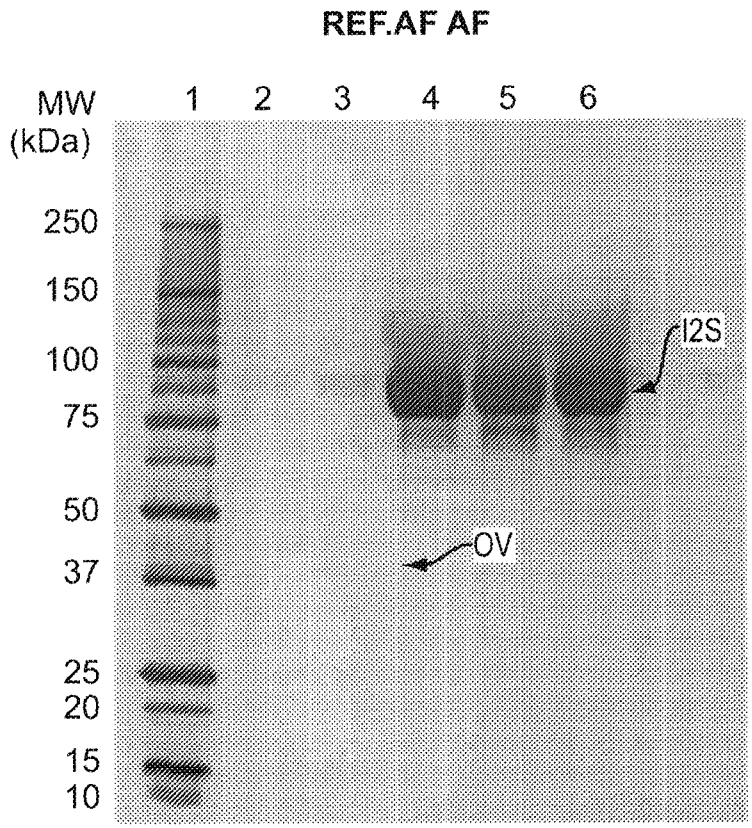

I2S AF
I2S REFERENCE
L5 - 5.047
L11 - 21.858
L18 - 25.508
L16 - 38.311
L3a - 44.373
L3b - 46.763
L10 - 51.405
L7 - 55.962
L4 - 62.652
L9 - 65.218
L17 - 70.170
L6 - 72.825
L14 - 74.725
L2a - 80.662
L2b - 81.200
L12 - 85.115
L20 - 100.267
L20 - 101.683
L15 - 105.771
L13 - 18.757
UNDIGESTED - 114.915
AU
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
-0.10
-0.20
-0.30
-0.40
-0.50
-0.60
-0.70
-0.80
-0.90
MINUTES
0.00
10.00
20.00
30.00
40.00
50.00
60.00
70.00
80.00
90.00
100.00
110.00
120.00
130.00
140.00
150.00

FIG. 2



LANE	LOAD SAMPLE	PAD ID	LOAD VOL. µl	TOTAL µg
1	PRECISION PLUS PROTEIN STDS (UNSTAINED)		3 µl	
2	ASSAY CONTROL #1		20	8 µg EACH, OV END REF
3	ASSAY CONTROL #2		20	18 µg EACH, OV END REF
4	REFERENCE STANDARD		20	8
5	RDSF 11-101 MOCK DS	11AD0545-1	20	8
6	RDSF 11-105 MOCK DS	11AD0545-2	20	8

FIG. 3

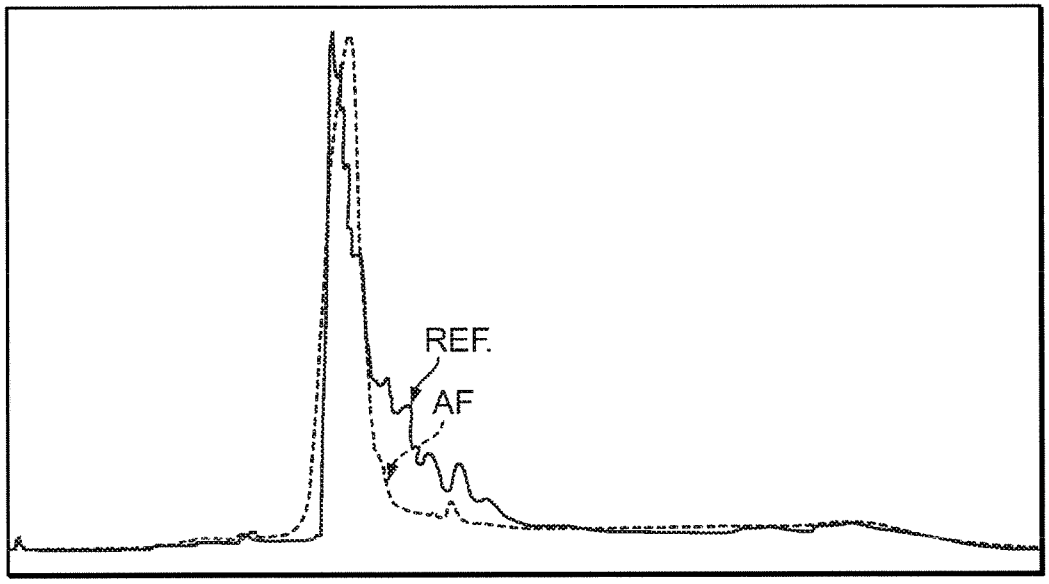


FIG. 4

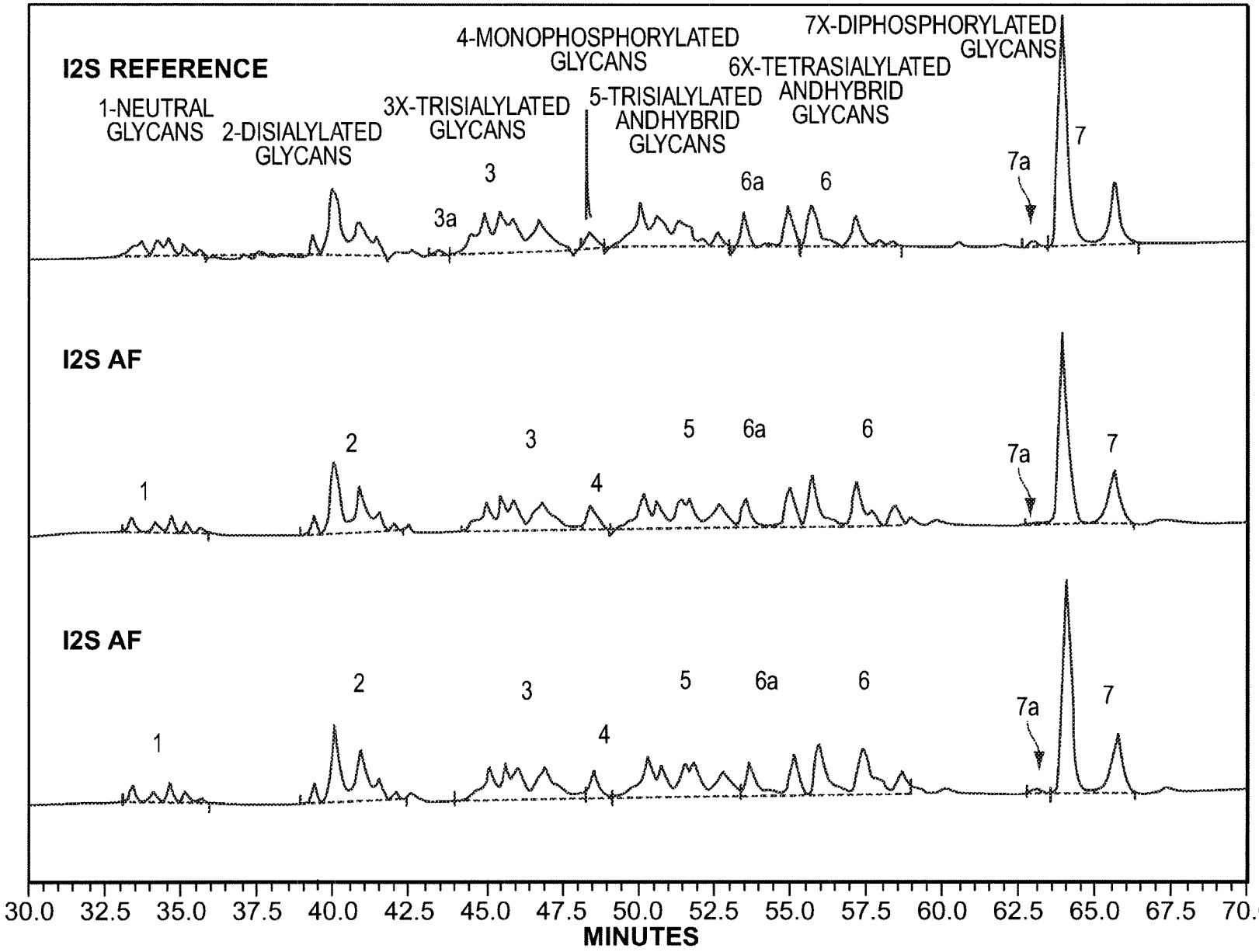

I2S REFERENCE
1-NEUTRAL GLYCANS
2-DISIALYLATED GLYCANS
3X-TRISIALYLATED GLYCANS
4-MONOPHOSPHORYLATED GLYCANS
5-TRISIALYLATED ANDHYBRID GLYCANS
6X-TETRASIALYLATED ANDHYBRID GLYCANS
7X-DIPHOSPHORYLATED GLYCANS
1
2
3
3a
4
5
6a
6
7a
7
I2S AF
I2S AF
30.0 32.5 35.0 37.5 40.0 42.5 45.0 47.5 50.0 52.5 55.0 57.5 60.0 62.5 65.0 67.5 70.0
MINUTES

FIG. 5

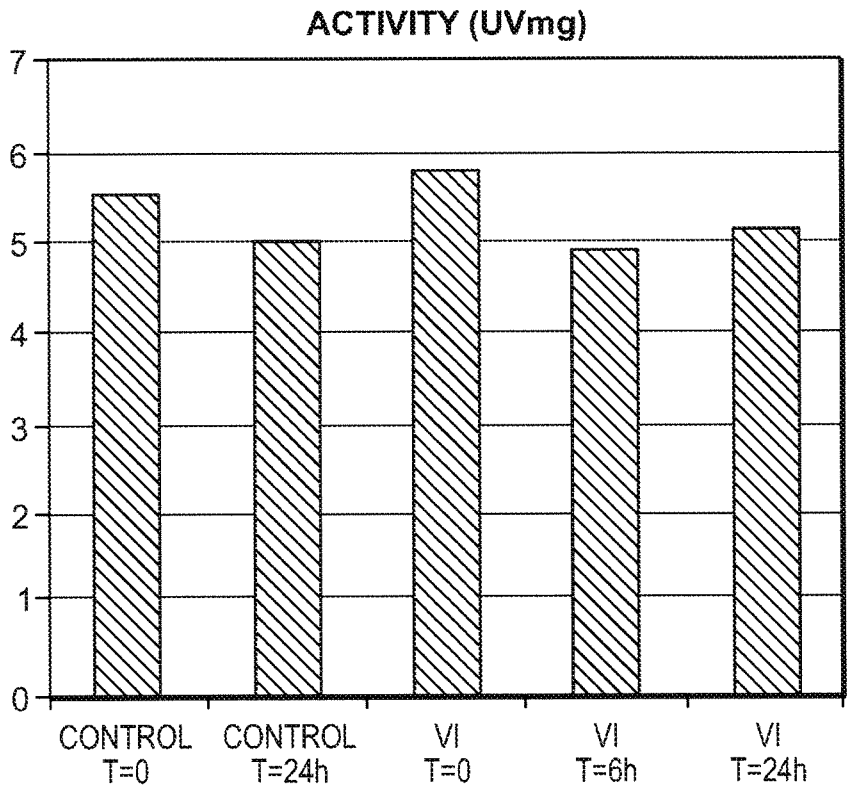

ACTIVITY (UVmg)
7
6
5
4
3
2
1
0
CONTROL T=0
CONTROL T=24h
VI T=0
VI T=6h
VI T=24h

FIG. 6

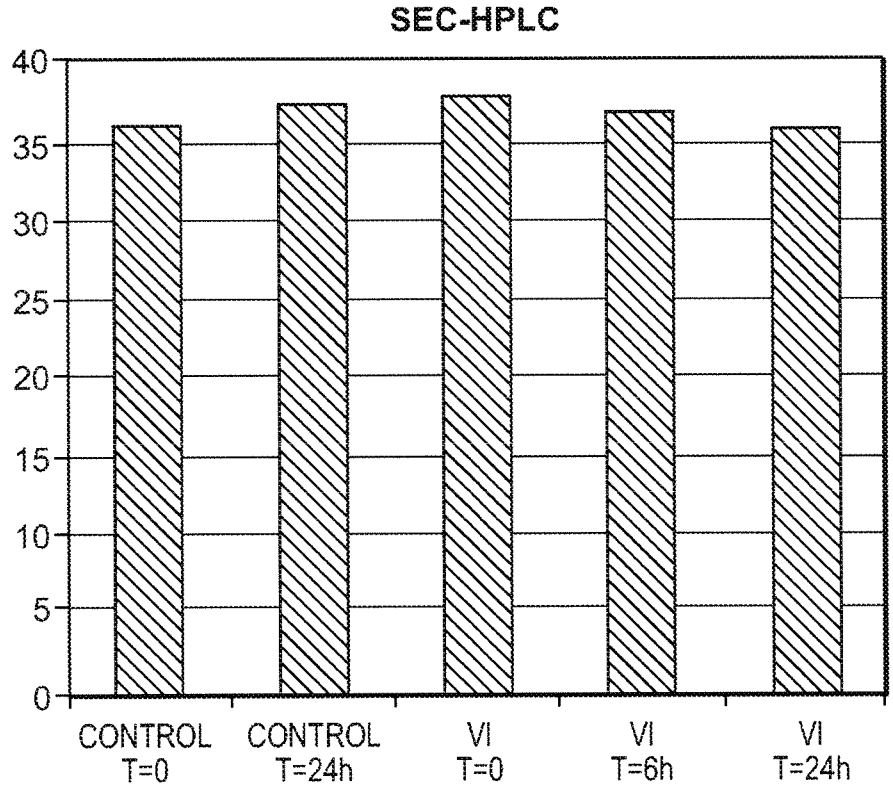
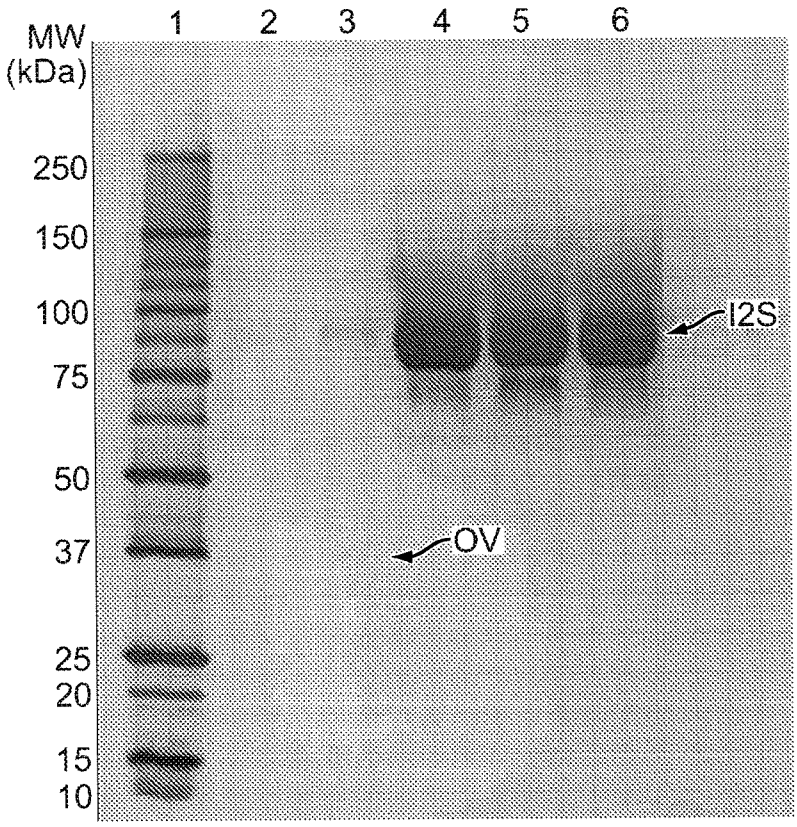

SEC-HPLC
40
35
30
25
20
15
10
5
0
CONTROL T=0
CONTROL T=24h
VI T=0
VI T=6h
VI T=24h

FIG. 7



LANE	LOAD SAMPLE	LOAD VOLUME	TOTAL µg
1	PROTEIN STDS	3 µl	
2	ASSAY CONTROL #18	20 µl	µg
3	ASSAY CONTROL #2	20 µl	16 µg
4	I2S REFERENCE STANDARD	20 µl	8 µg
5	I2S-AF 2D SERUM-FREE CULTURE	20 µl	8 µg
6	I2S-AF 4D SERUM-FREE CULTURE	20 µl	8 µg

FIG. 8

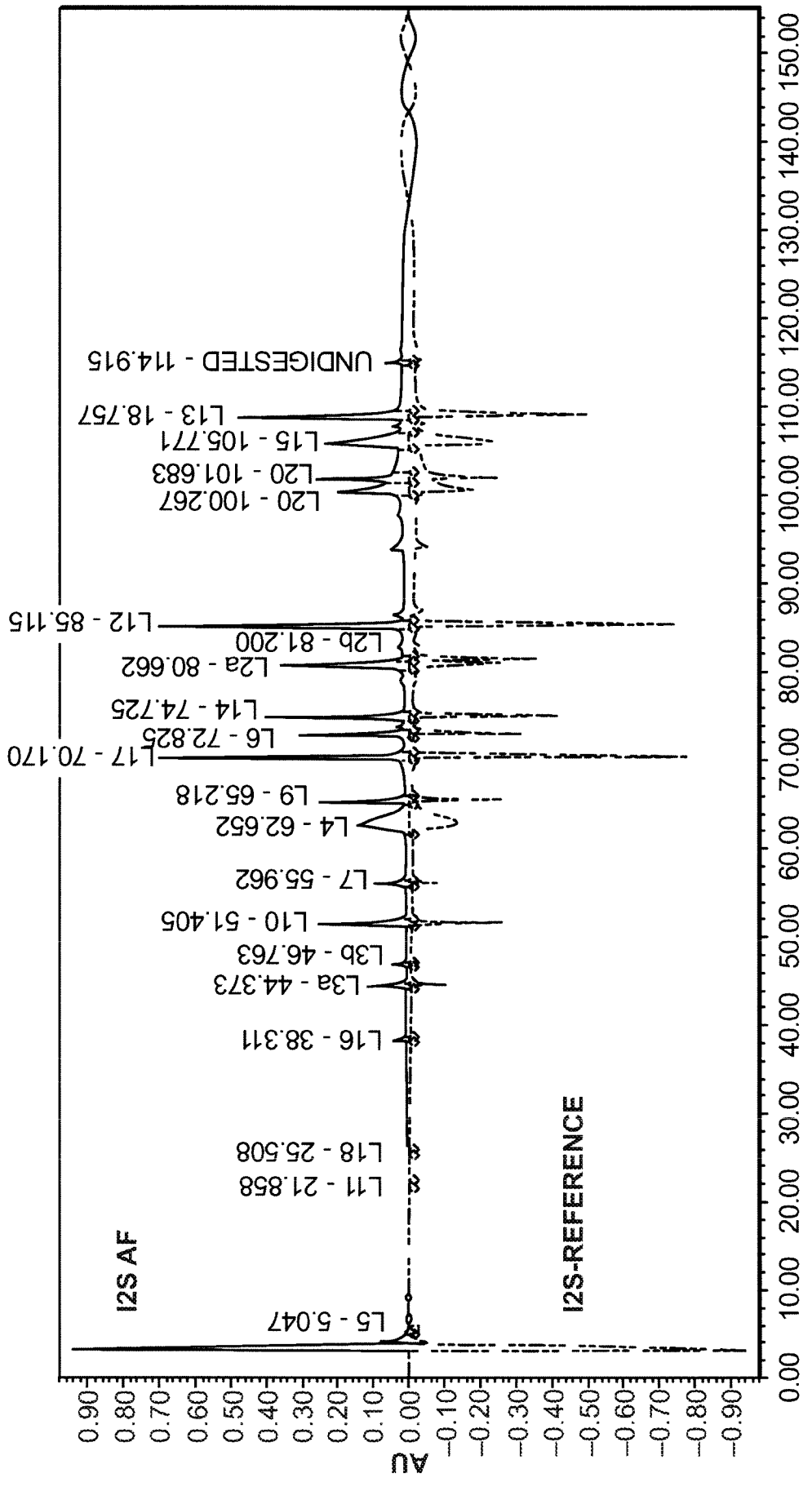

I2S AF
I2S-REFERENCE
L5 - 5.047
L11 - 21.858
L18 - 25.508
L16 - 38.311
L3a - 44.373
L3b - 46.763
L10 - 51.405
L7 - 55.962
L4 - 62.652
L9 - 65.218
L17 - 70.170
L6 - 72.825
L14 - 74.725
L2a - 80.662
L2b - 81.200
L12 - 85.115
L20 - 100.267
L20 - 101.683
L15 - 105.771
L13 - 18.757
UNDIGESTED - 114.915
AU
MINUTES
0.00
10.00
20.00
30.00
40.00
50.00
60.00
70.00
80.00
90.00
100.00
110.00
120.00
130.00
140.00
150.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
−0.10
−0.20
−0.30
−0.40
−0.50
−0.60
−0.70
−0.80
−0.90

FIG. 9

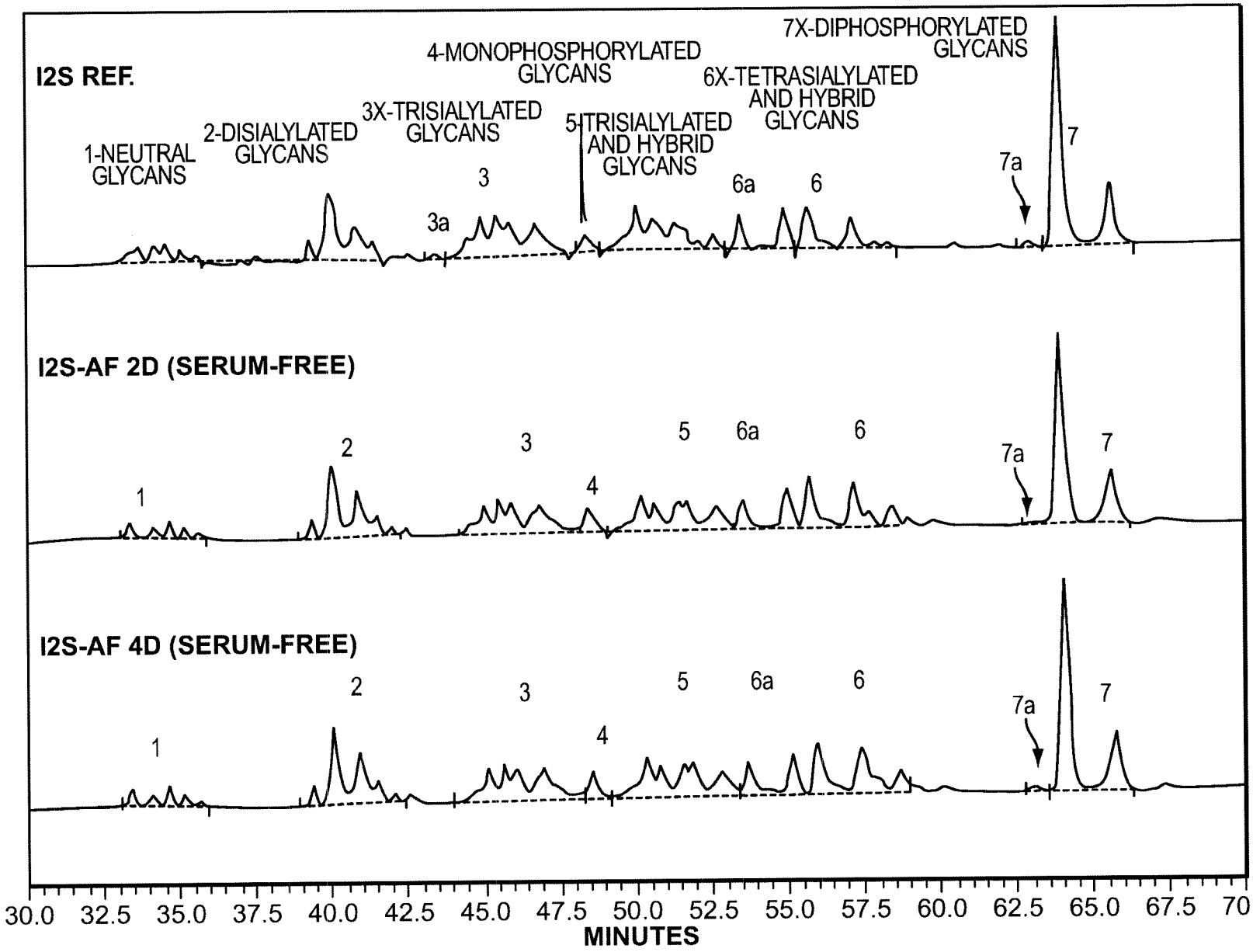

I2S REF.
1-NEUTRAL GLYCANS
2-DISIALYLATED GLYCANS
3X-TRISIALYLATED GLYCANS
4-MONOPHOSPHORYLATED GLYCANS
5-TRISIALYLATED AND HYBRID GLYCANS
6X-TETRASIALYLATED AND HYBRID GLYCANS
7X-DIPHOSPHORYLATED GLYCANS
1
2
3
3a
4
5
6a
6
7a
7
I2S-AF 2D (SERUM-FREE)
I2S-AF 4D (SERUM-FREE)
30.0 32.5 35.0 37.5 40.0 42.5 45.0 47.5 50.0 52.5 55.0 57.5 60.0 62.5 65.0 67.5 70.0
MINUTES

FIG. 10

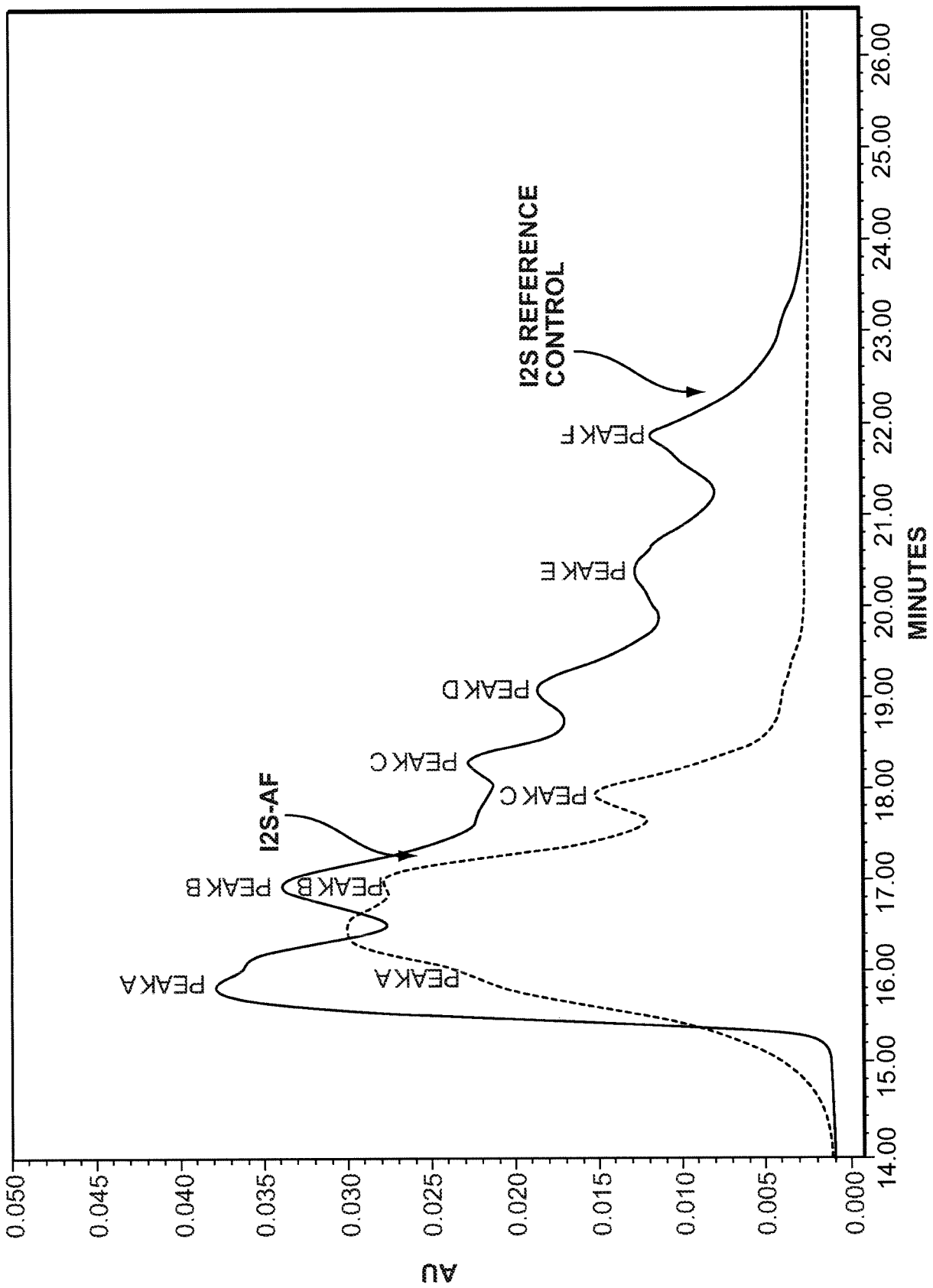

0.050
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
AU
14.00
15.00
16.00
17.00
18.00
19.00
20.00
21.00
22.00
23.00
24.00
25.00
26.00
MINUTES
I2S-AF
I2S REFERENCE CONTROL
PEAK A
PEAK B
PEAK C
PEAK D
PEAK E
PEAK F
PEAK A
PEAK B
PEAK C

FIG. 11