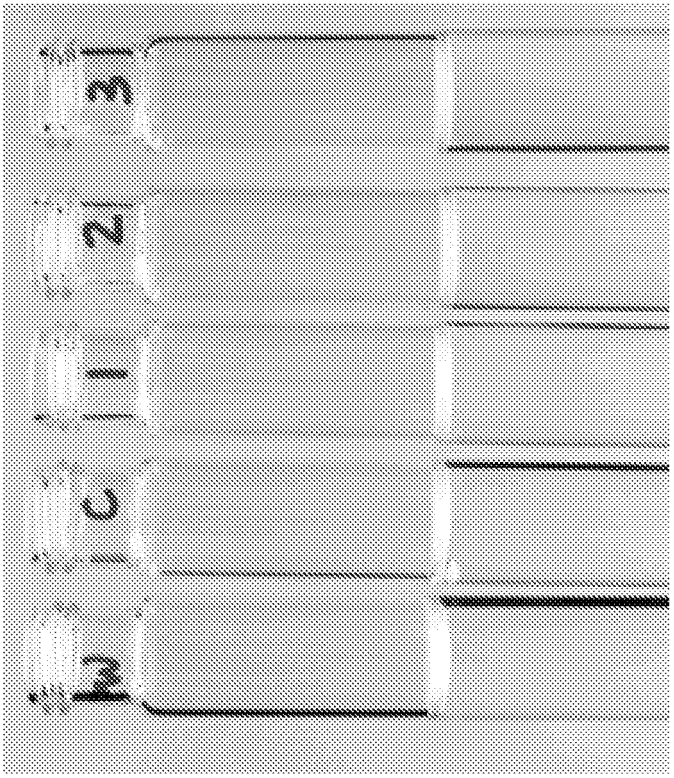


PW = purified water
C = Development control run
1 = Run 1
2 = Run 2
3 = Run 3

FIG. 1

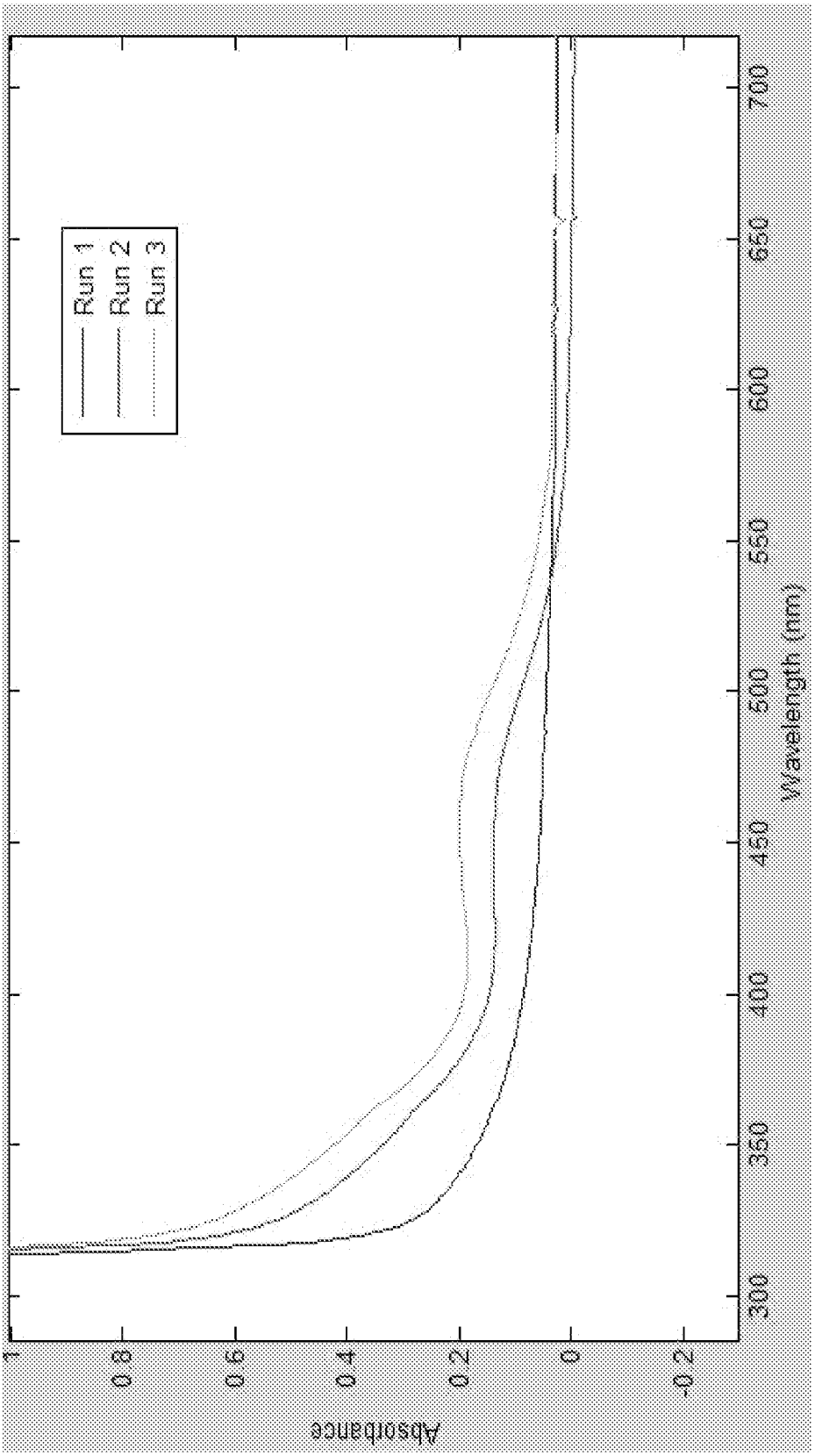

Run 1
Run 2
Run 3
Absorbance
1
0.8
0.6
0.4
0.2
0
-0.2
300
350
400
450
500
550
600
650
700
Wavelength (nm)

FIG. 2A

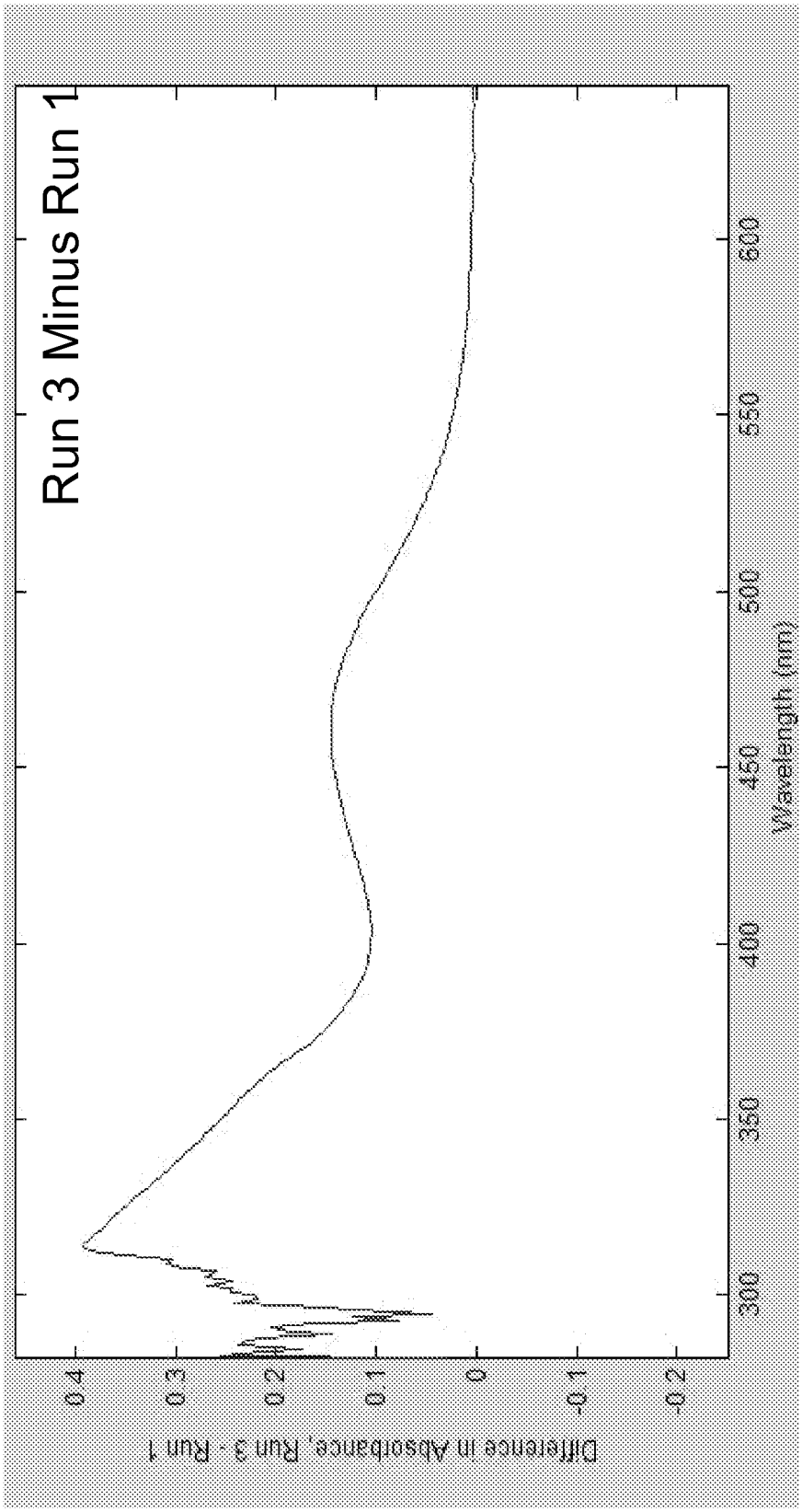

Run 3 Minus Run 1
Difference in Absorbance, Run 3 - Run 1
0.4
0.3
0.2
0.1
0
-0.1
-0.2
300
350
400
450
500
550
600
Wavelength (nm)

FIG. 2B

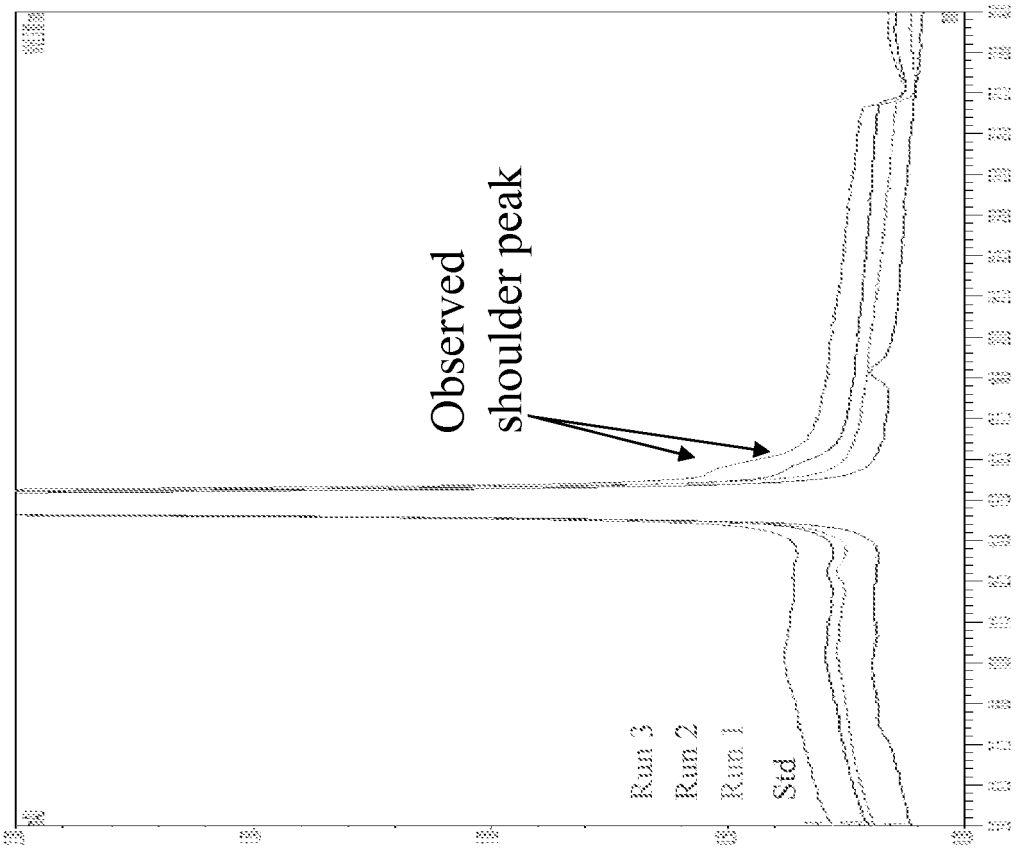


FIG. 3

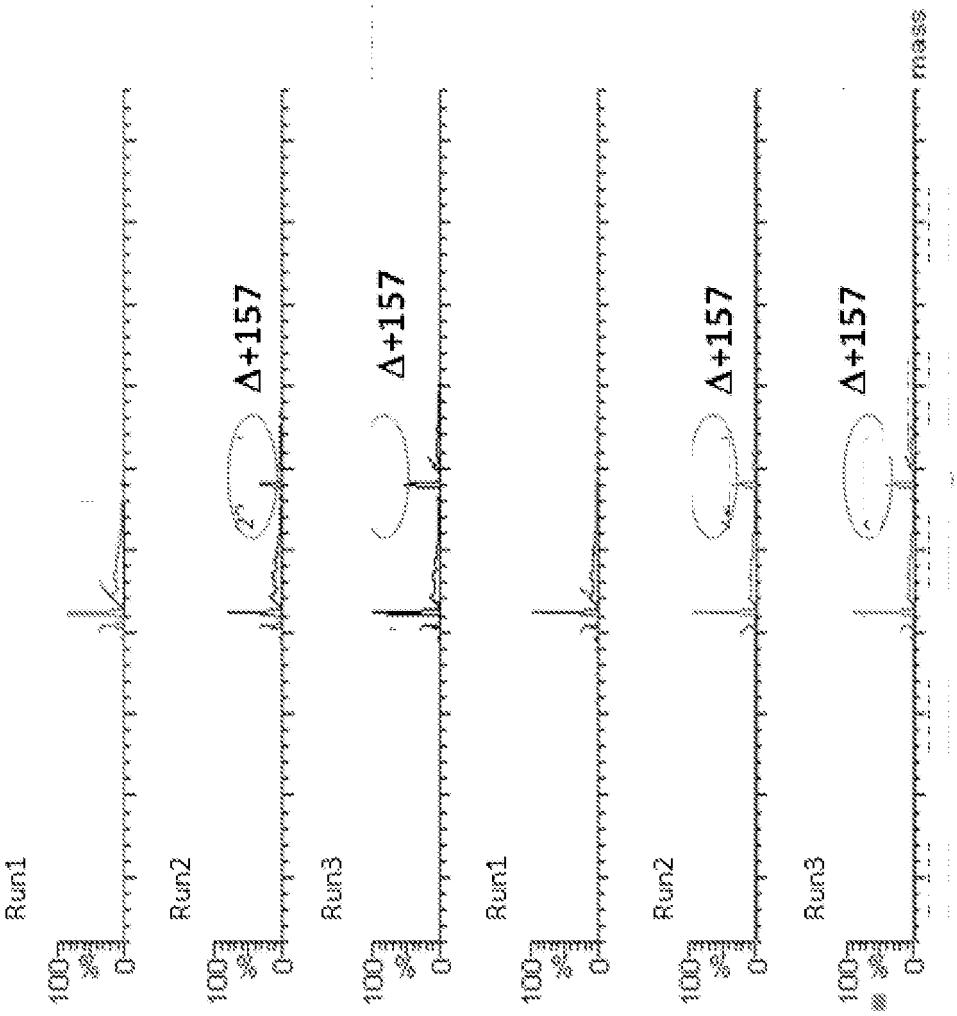

Run1
100
%
0
Run2
100
%
0
Δ+157
Run3
100
%
0
Δ+157
Run1
100
%
0
Run2
100
%
0
Δ+157
Run3
100
%
0
Δ+157
mass

FIG. 4

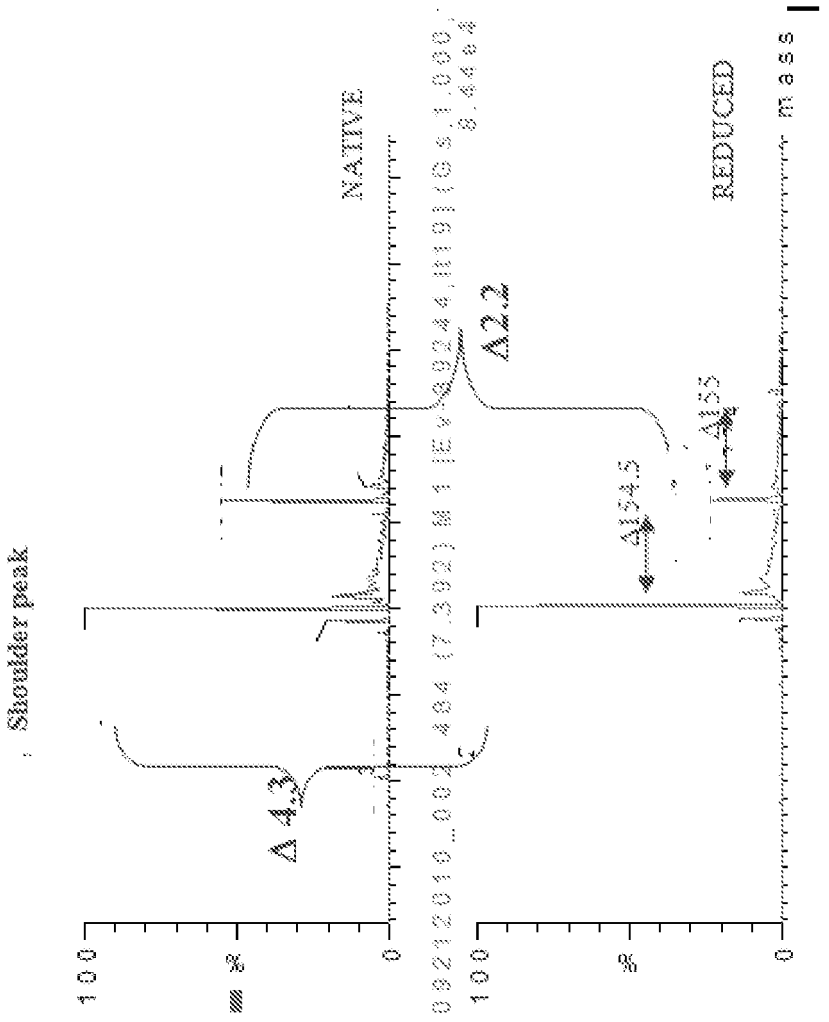


FIG. 5

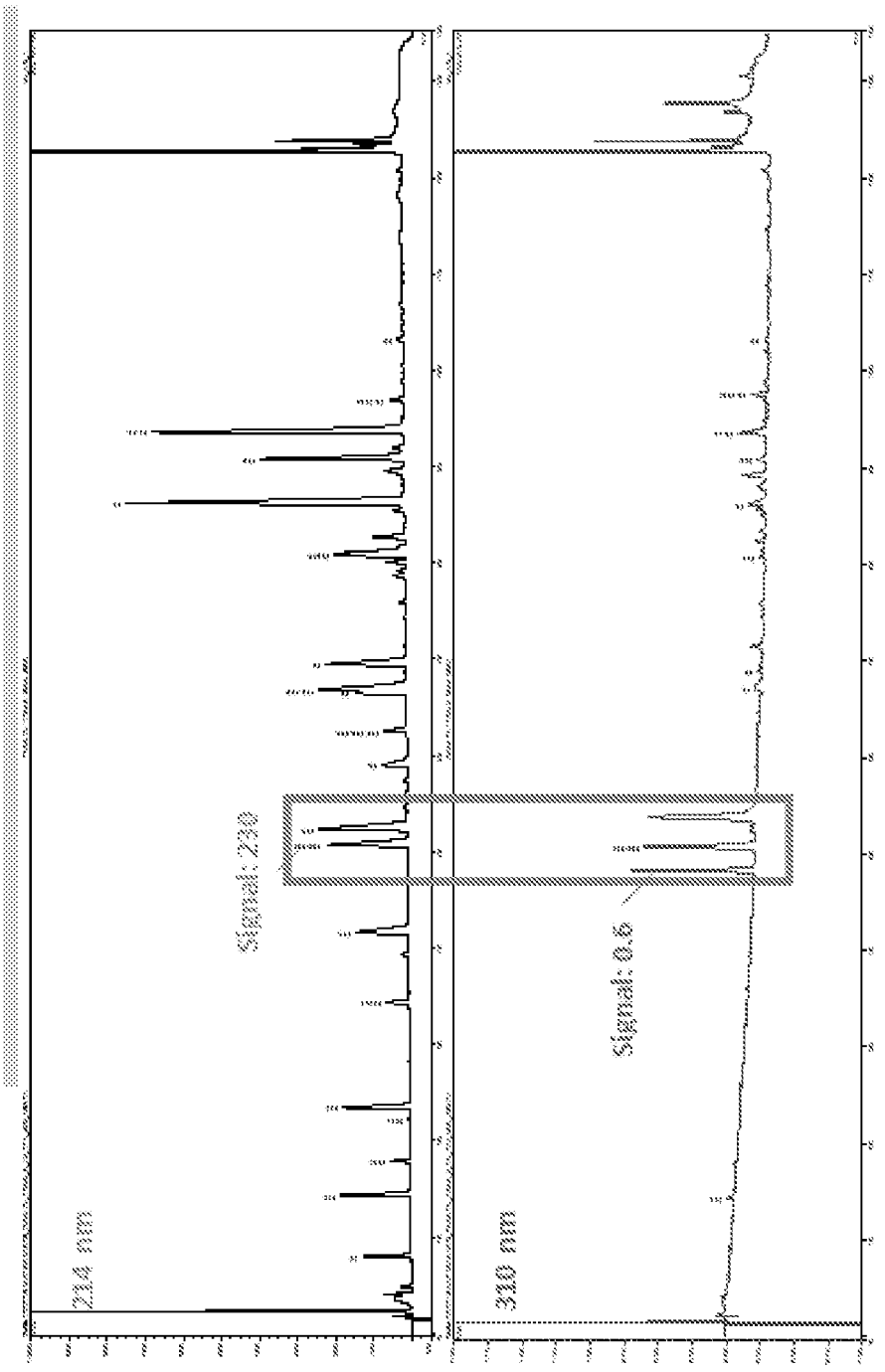


FIG. 6

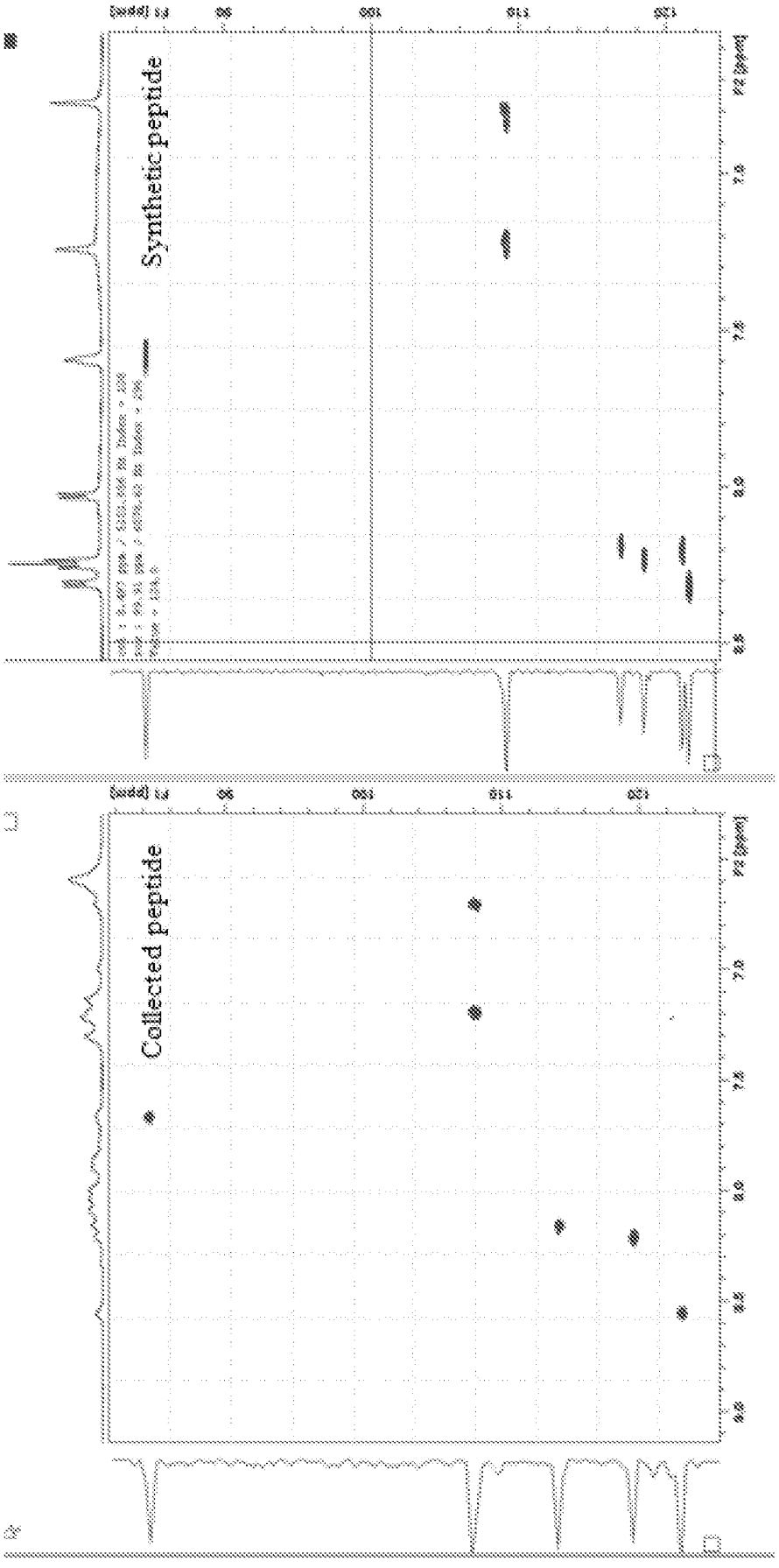


FIG. 7

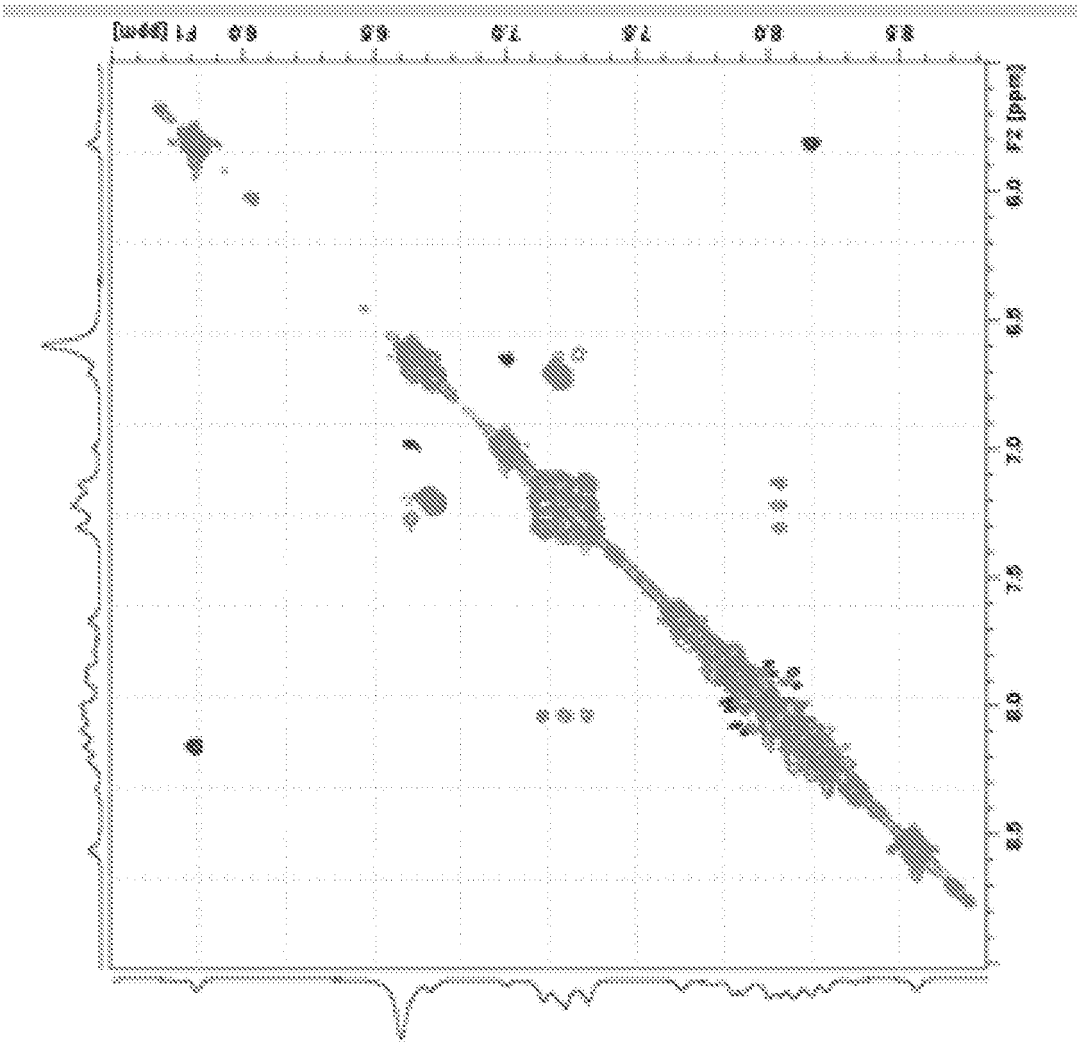


FIG. 8

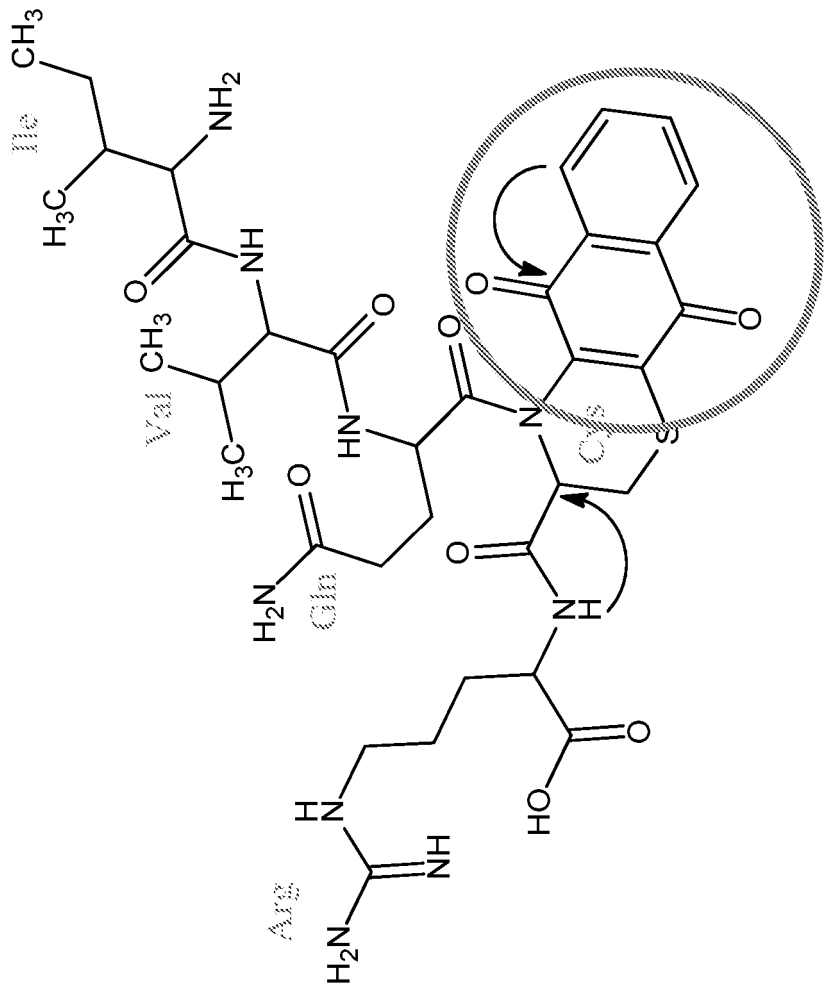


FIG. 9

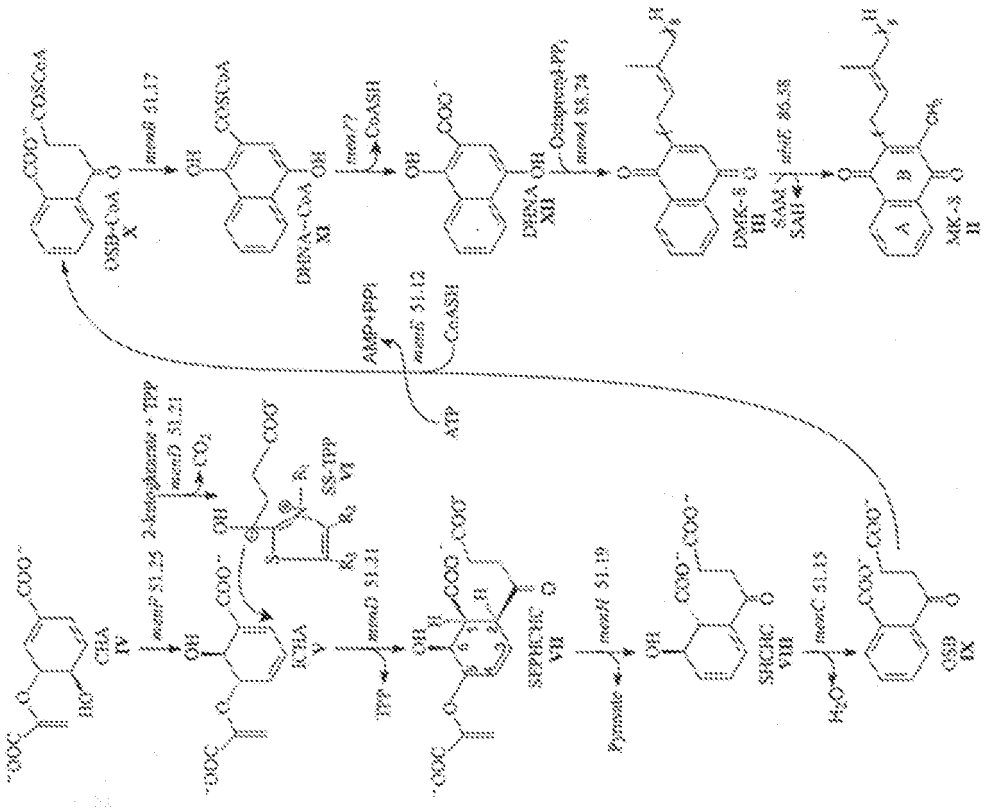


FIG. 10

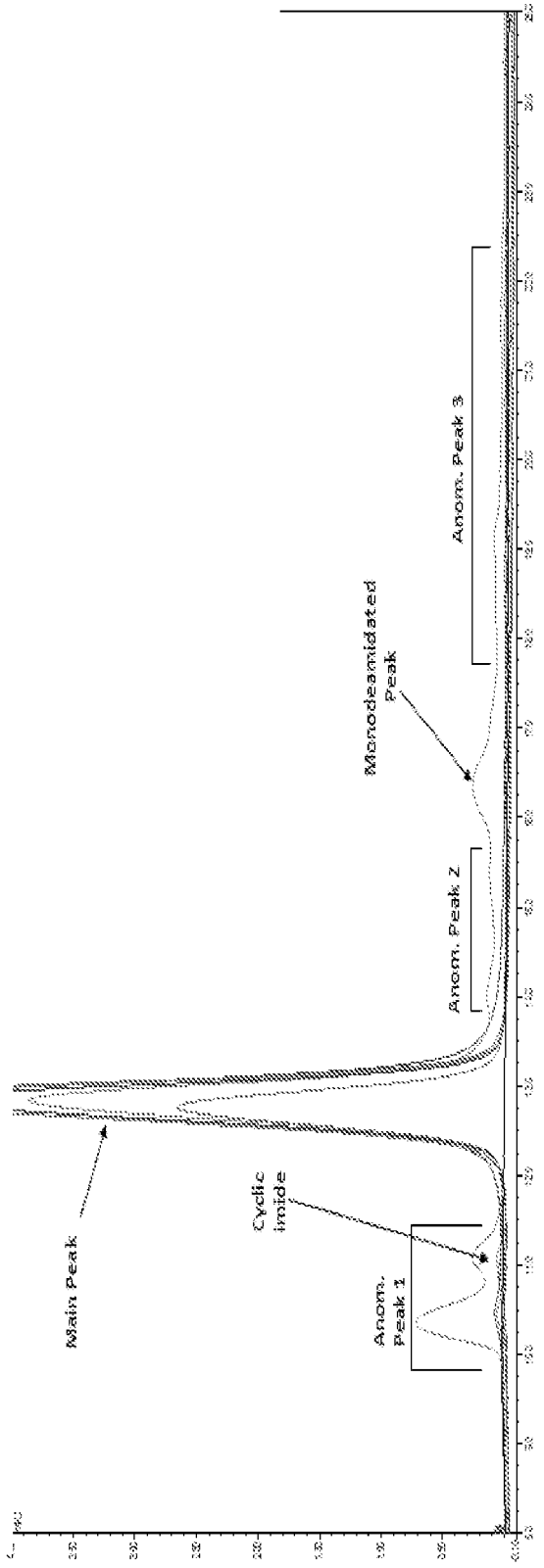

Main Peak
Cyclic imide
Anom. Peak 1
Monodeamidated Peak
Anom. Peak 2
Anom. Peak 3

FIG. 11

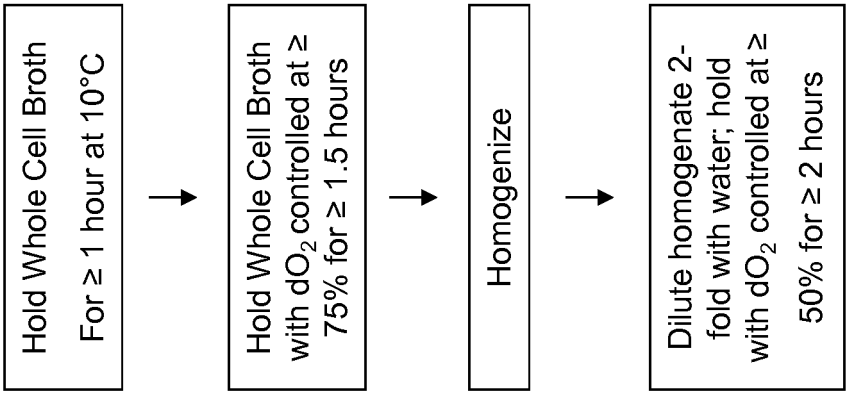

Hold Whole Cell Broth For ≥ 1 hour at 10°C
Hold Whole Cell Broth with dO_2 controlled at ≥ 75% for ≥ 1.5 hours
Homogenize
Dilute homogenate 2-fold with water; hold with dO_2 controlled at ≥ 50% for ≥ 2 hours

FIG. 12