FIG. 1

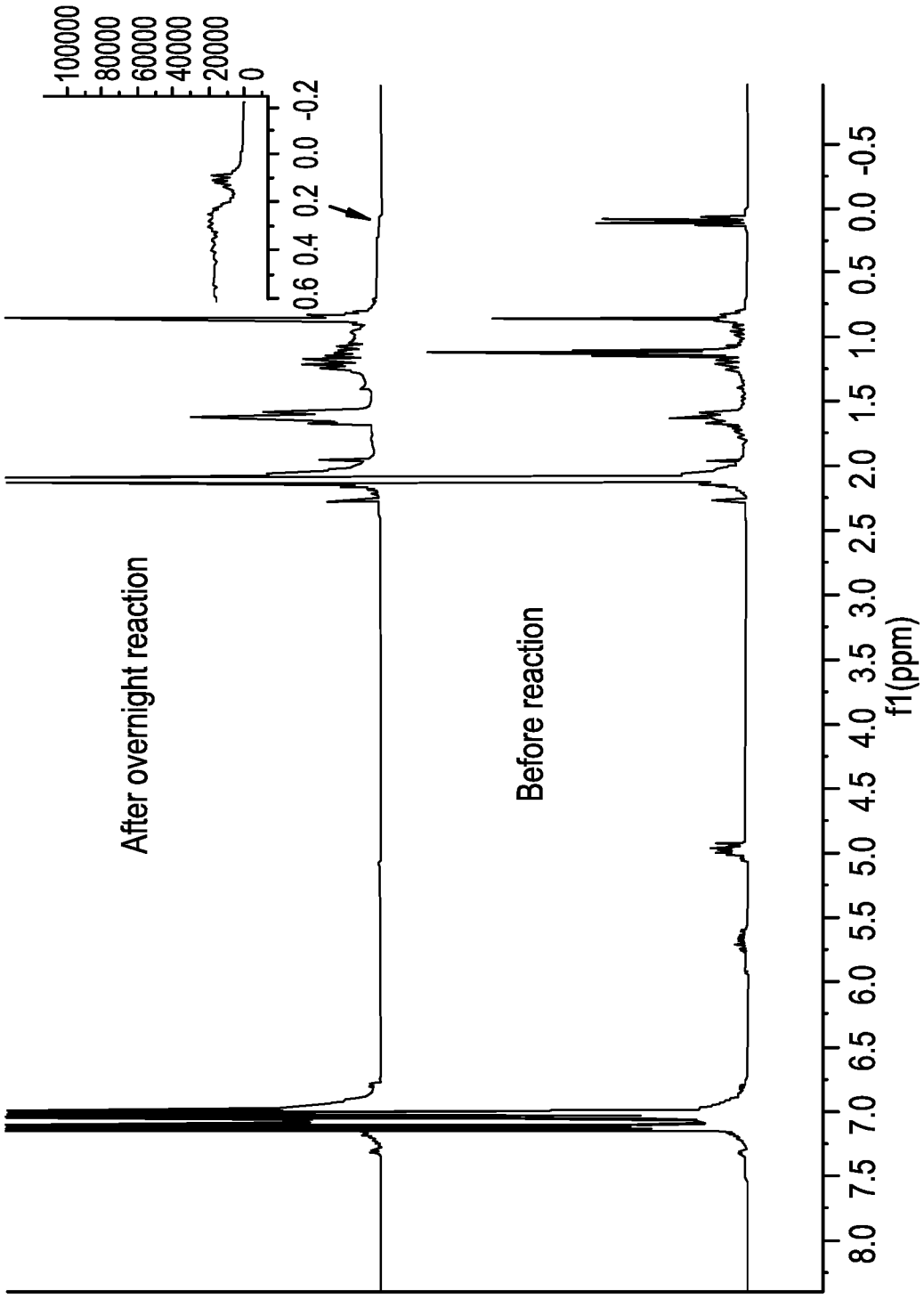

After overnight reaction
Before reaction
f1(ppm)
8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0 -0.5
100000
80000
60000
40000
20000
0
0.6 0.4 0.2 0.0 -0.2

FIG. 2

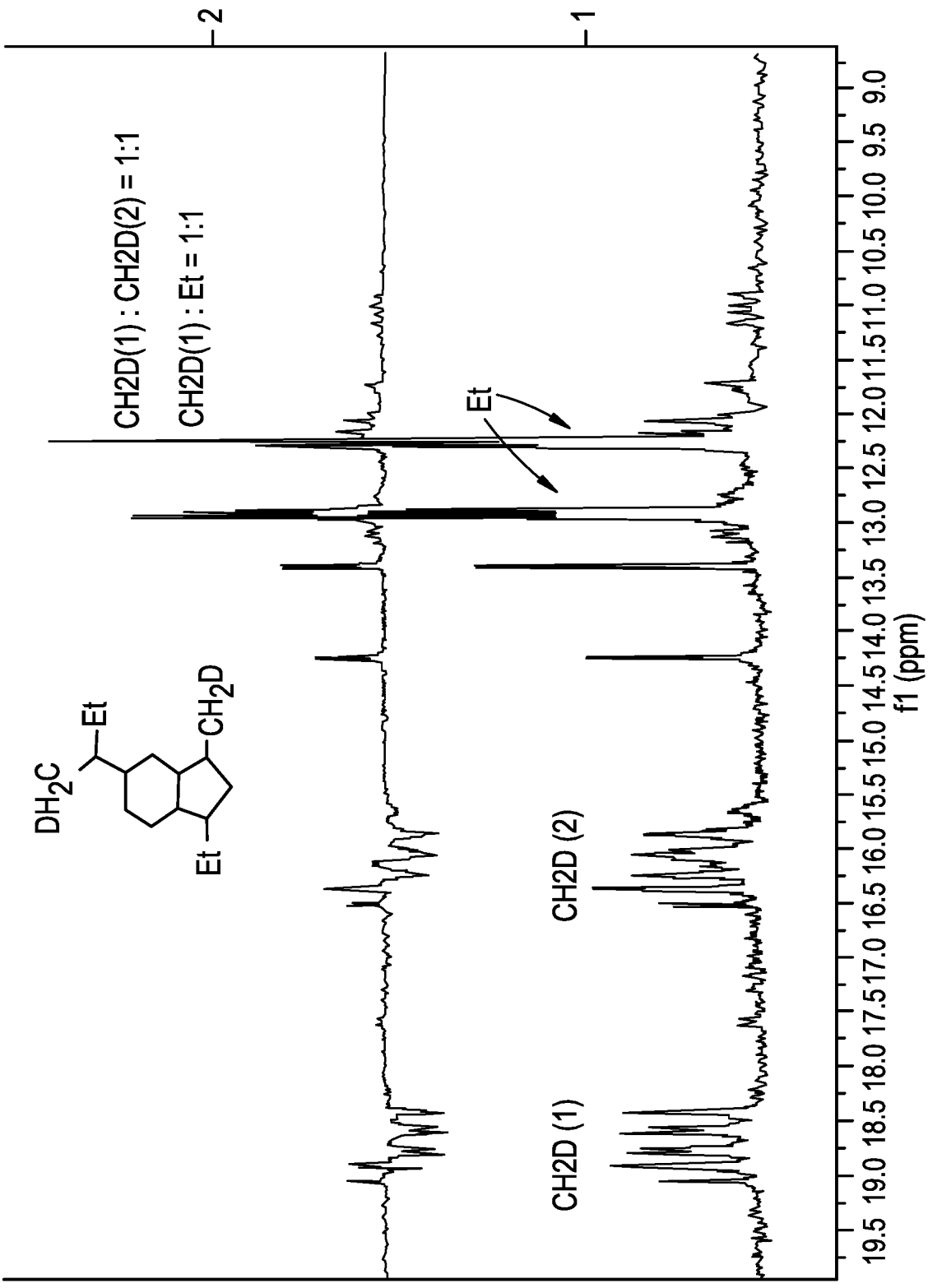

CH2D(1) : CH2D(2) = 1:1
CH2D(1) : Et = 1:1
Et
CH2D (2)
CH2D (1)
DH2C
Et
CH2D
Et
2
1
19.5 19.0 18.5 18.0 17.5 17.0 16.5 16.0 15.5 15.0 14.5 14.0 13.5 13.0 12.5 12.0 11.5 11.0 10.5 10.0 9.5 9.0
f1 (ppm)

FIG. 3A

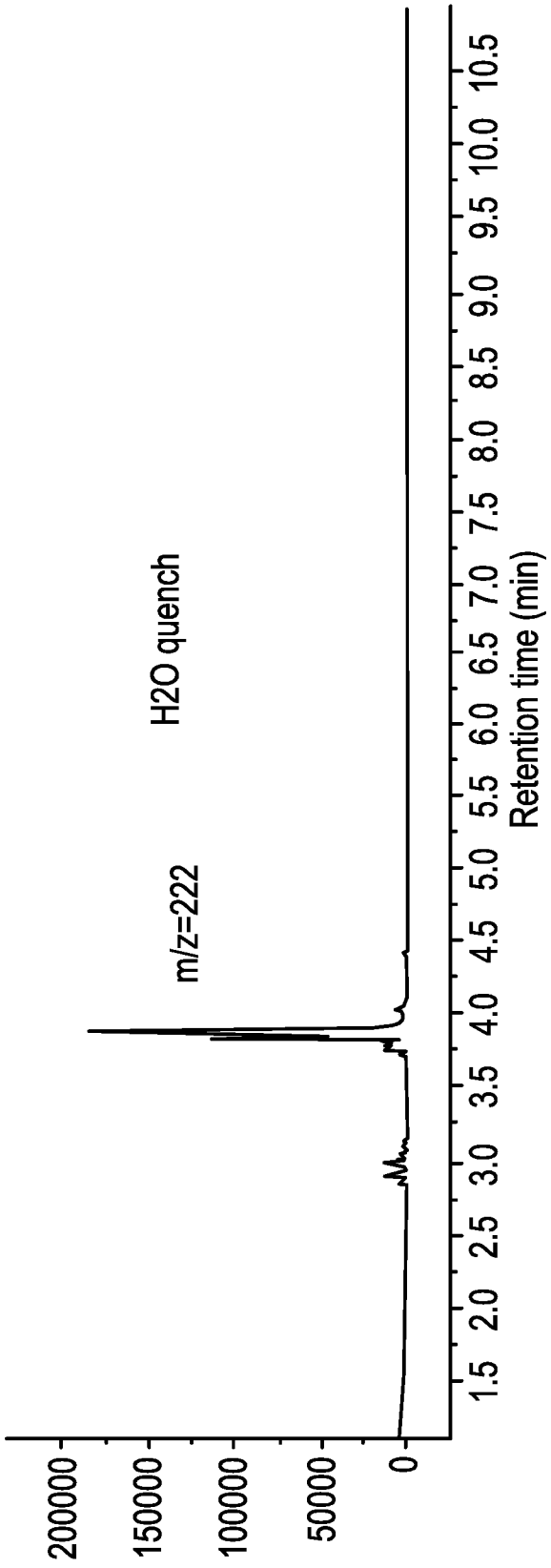

m/z=222
H2O quench
200000
150000
100000
50000
0
1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0 10.5
Retention time (min)

FIG. 3B


D2O quench
m/z=224
140000
120000
100000
80000
60000
40000
20000
0
1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0 10.5 1.5
Retention time (min)

FIG. 4

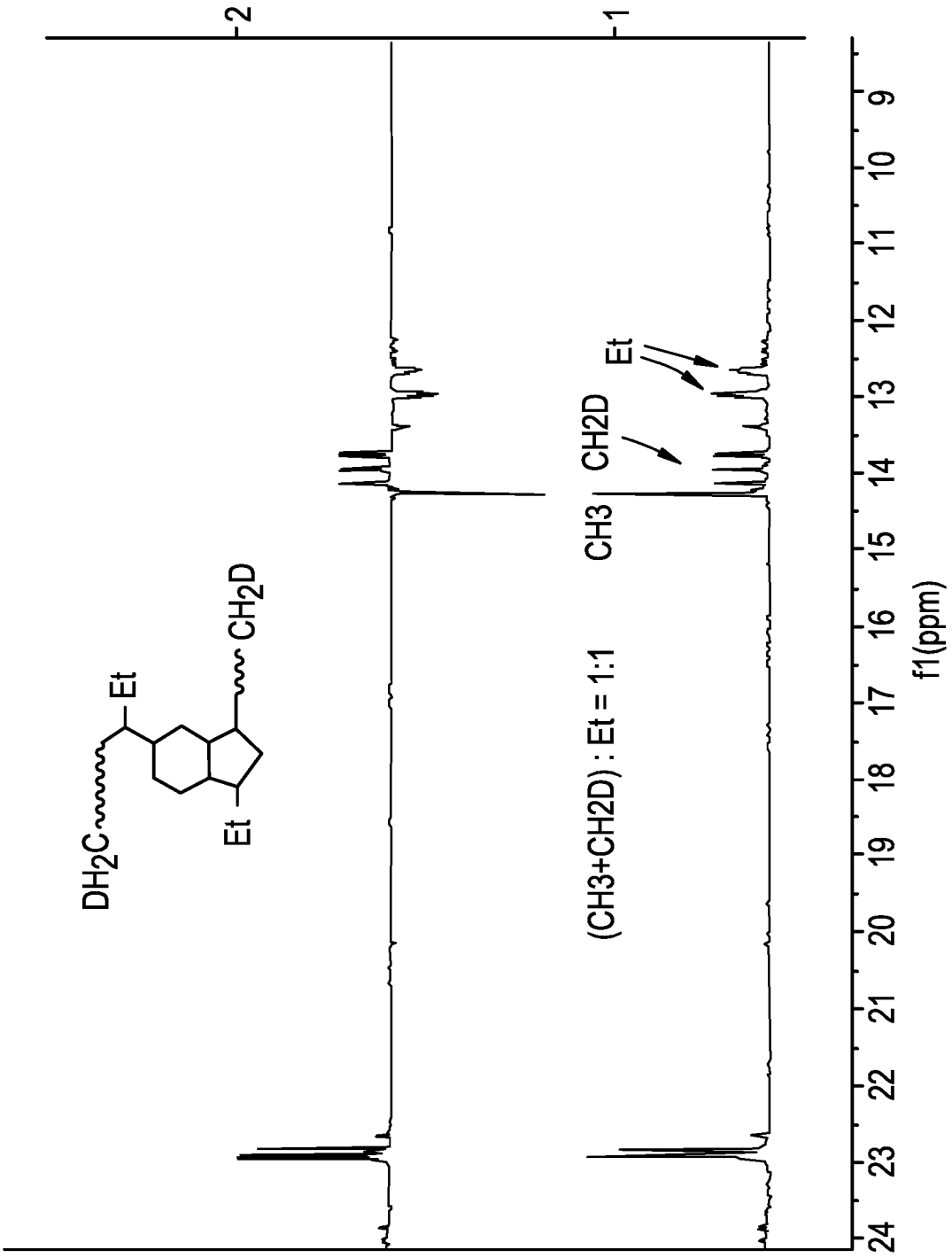


FIG. 5

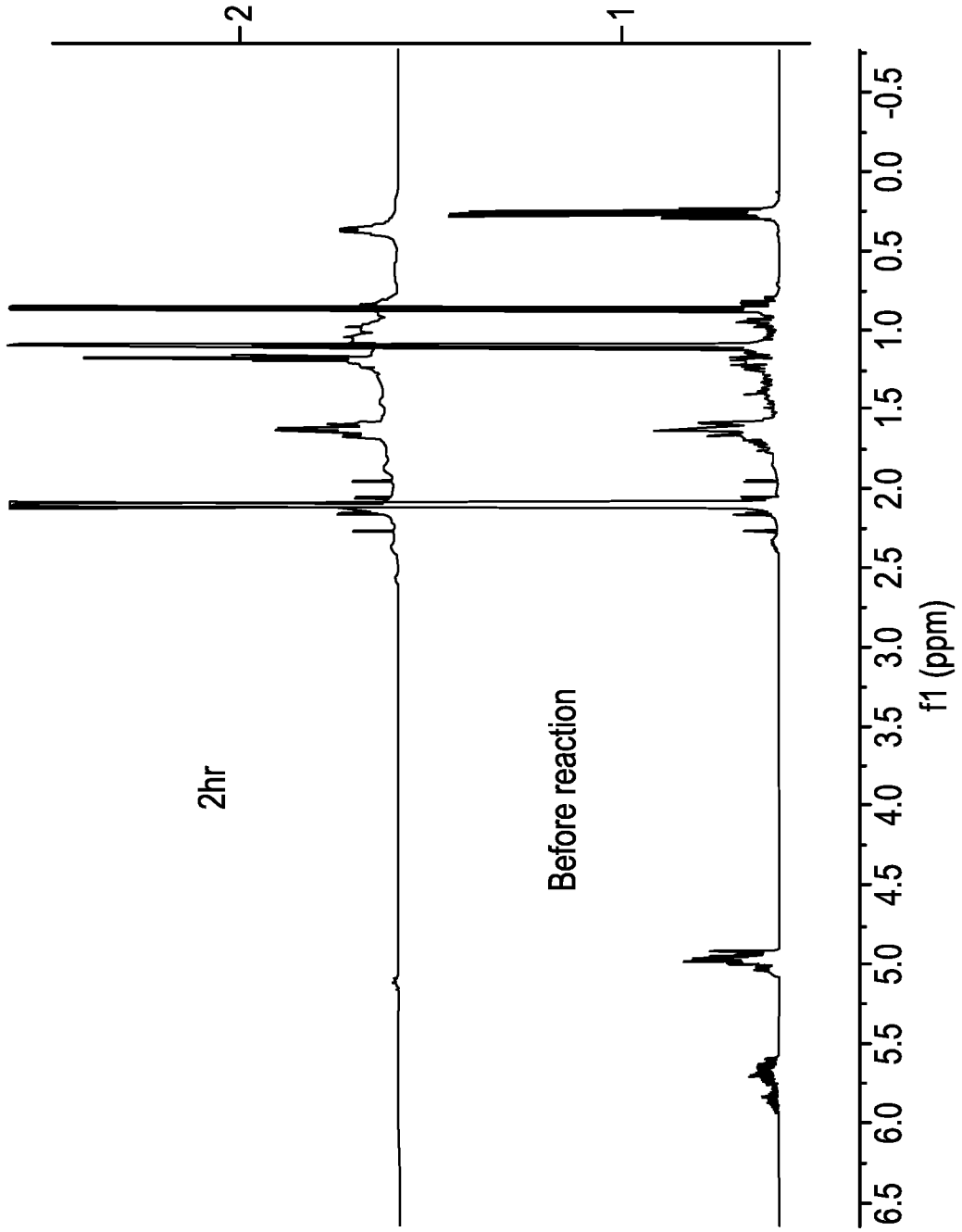
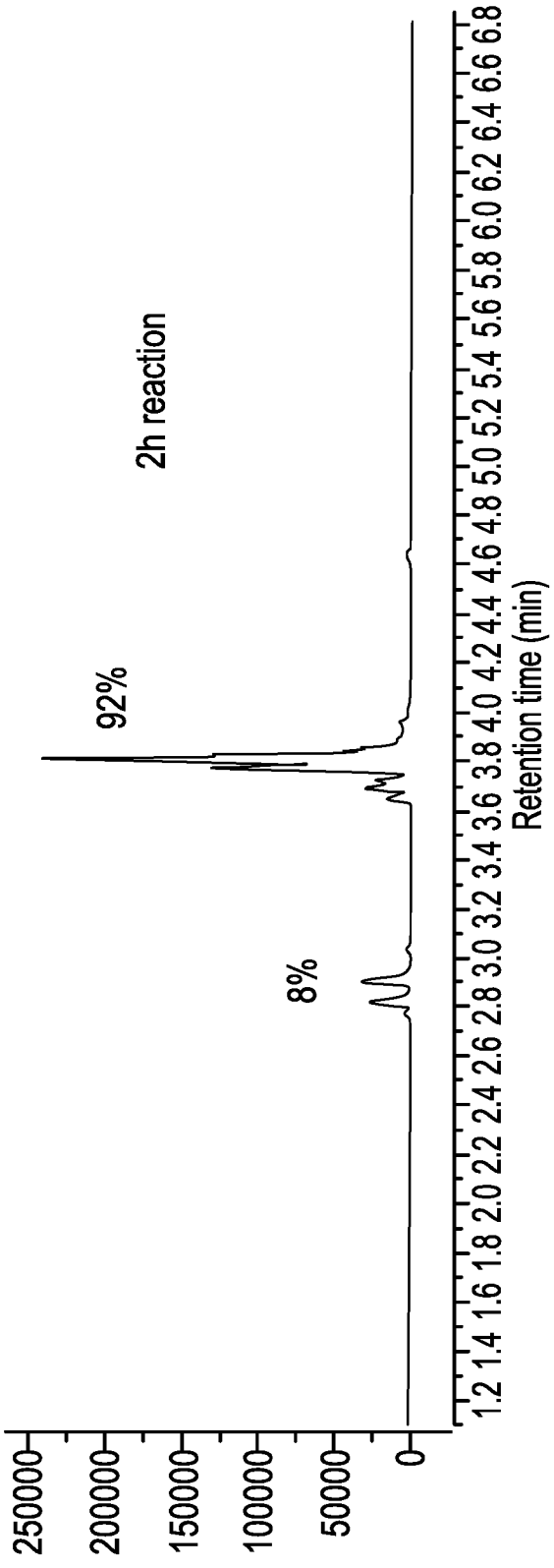

2
1
2hr
Before reaction
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
f1 (ppm)

FIG. 6


92%
8%
2h reaction
250000
200000
150000
100000
50000
0
1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6 5.8 6.0 6.2 6.4 6.6 6.8
Retention time (min)