附图

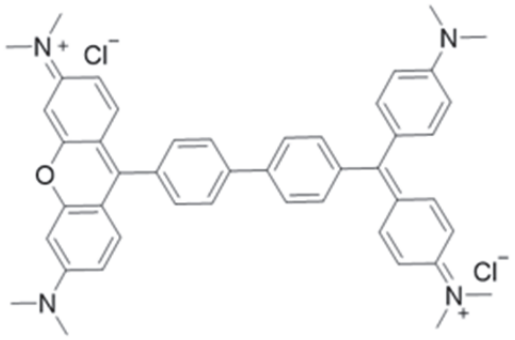

图 1

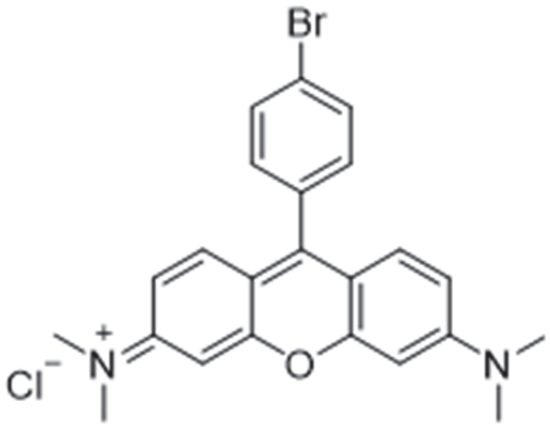

图 2

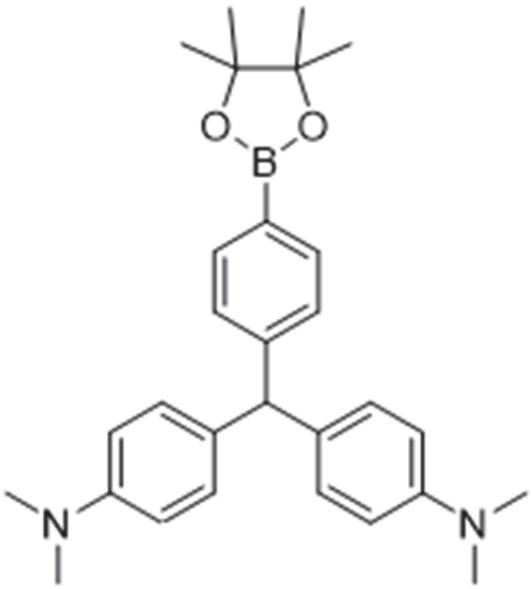

图 3

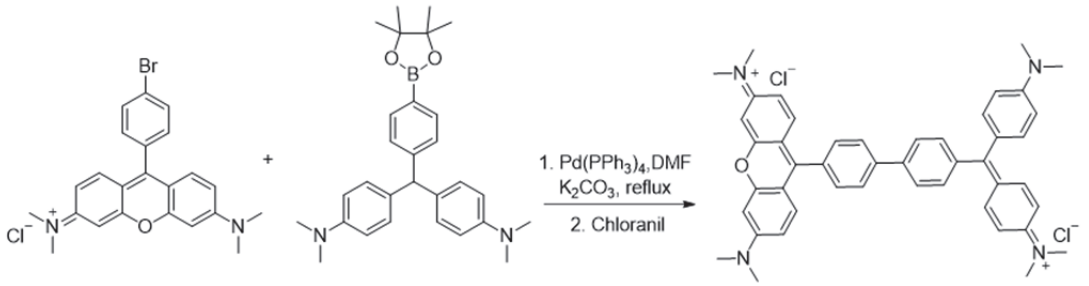
Br
Cl⁻
N⁺
O
N
B
O
O
1. Pd(PPh3)4,DMF
K2CO3, reflux
2. Chloranil
Cl⁻
Cl⁻

图 4

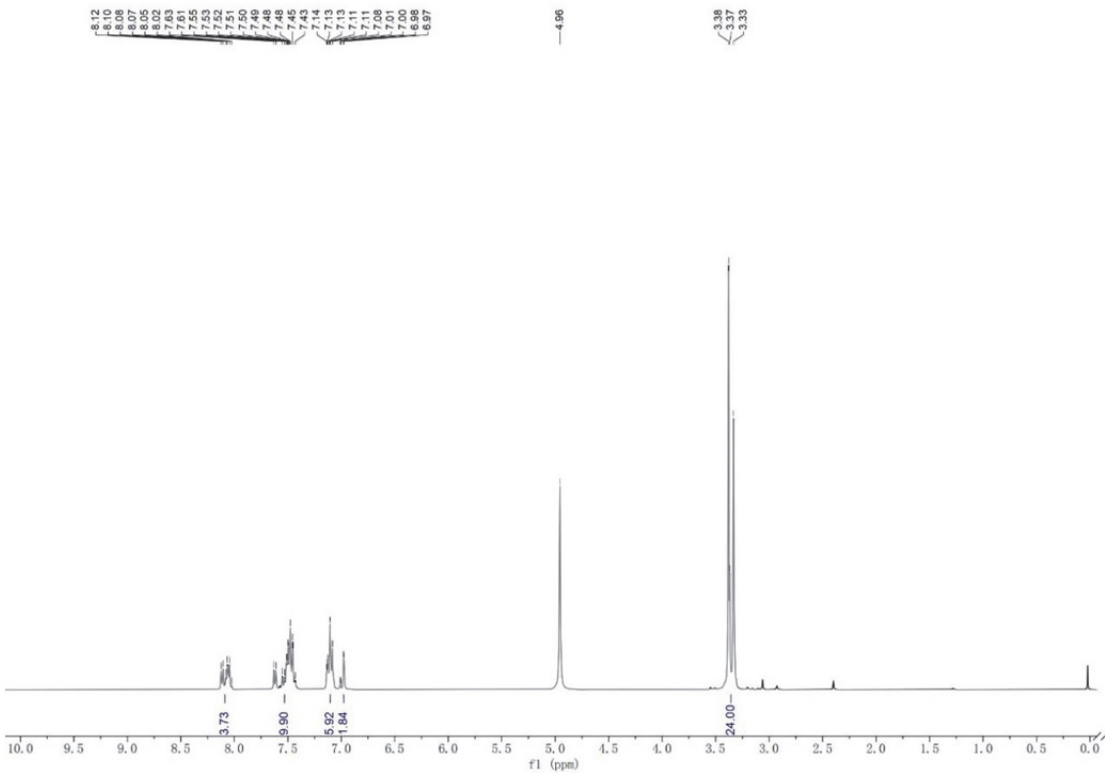
8.12
8.10
8.08
8.07
8.05
8.02
7.63
7.61
7.55
7.53
7.52
7.51
7.50
7.49
7.48
7.46
7.45
7.43
7.14
7.13
7.13
7.11
7.11
7.08
7.01
7.00
6.98
6.97
4.96
3.38
3.37
3.33
3.73
9.90
5.92
1.84
24.00
f1 (ppm)

图 5

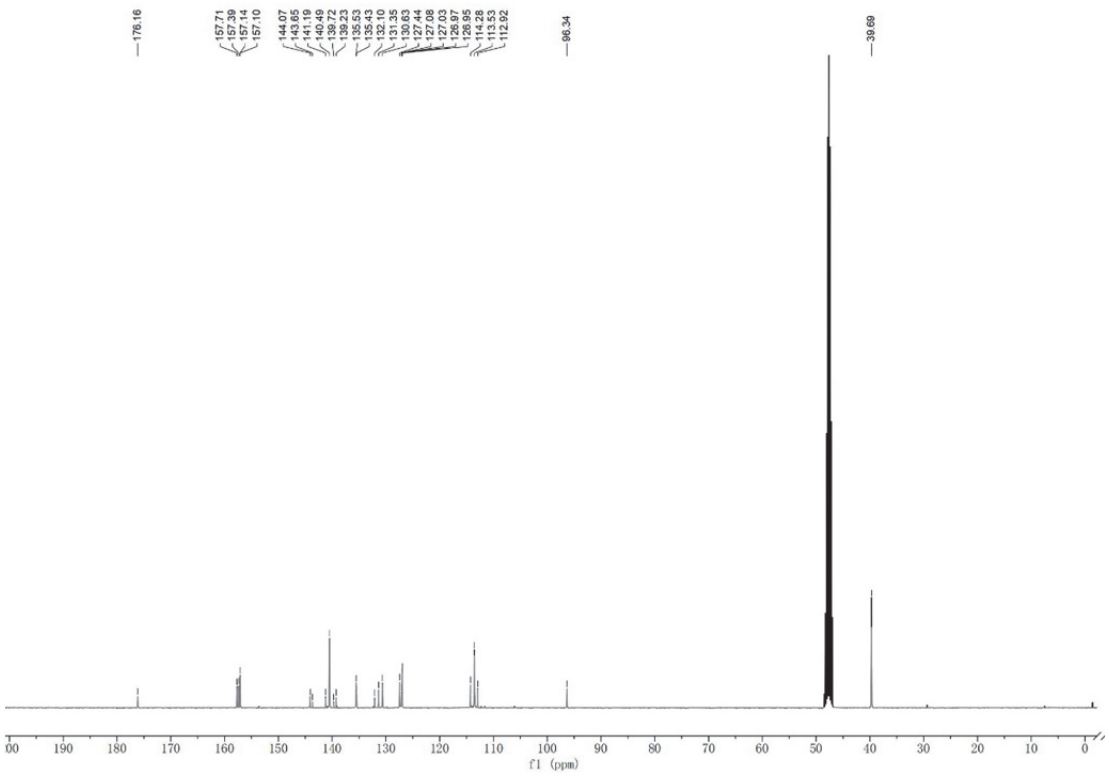
176.16
157.71
157.39
157.14
157.10
144.07
143.66
141.69
140.49
139.72
139.23
135.53
135.43
132.10
131.35
130.63
127.44
127.08
127.03
126.97
126.95
114.28
113.53
112.92
96.34
39.69
f1 (ppm)

图 6

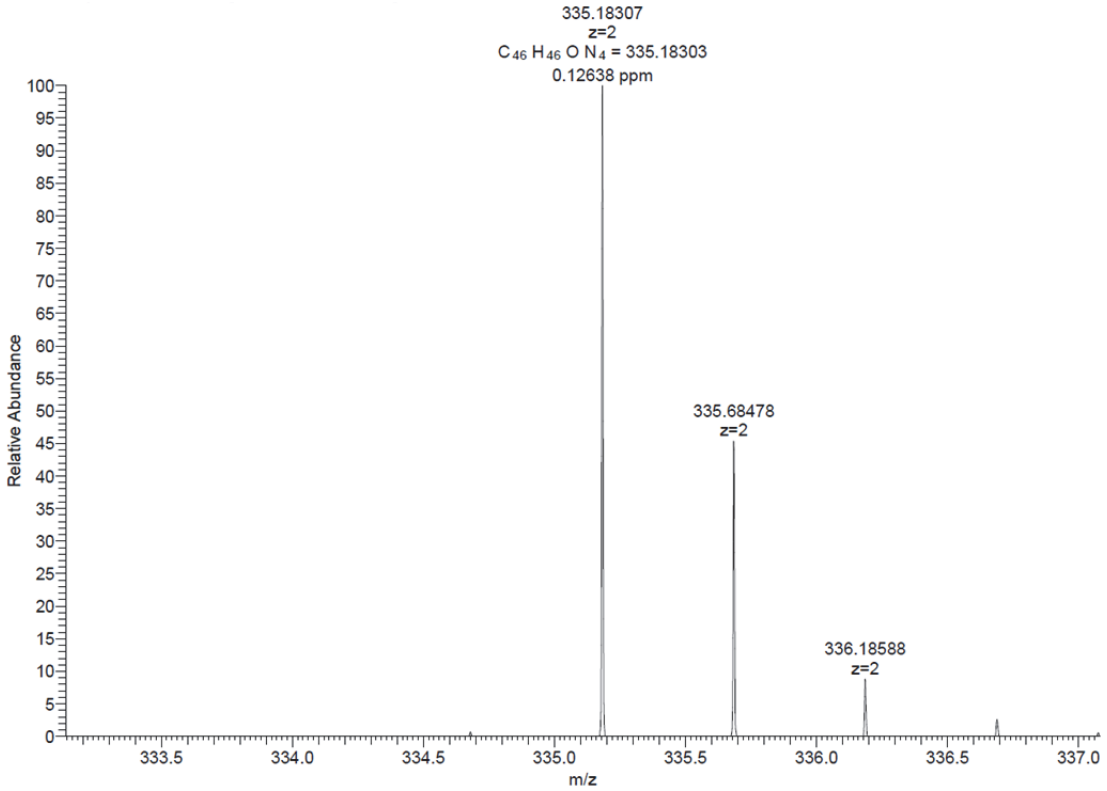
335.18307
z=2
C46 H46 O N4 = 335.18303
0.12638 ppm
335.68478
z=2
336.18588
z=2
Relative Abundance
m/z

图 7

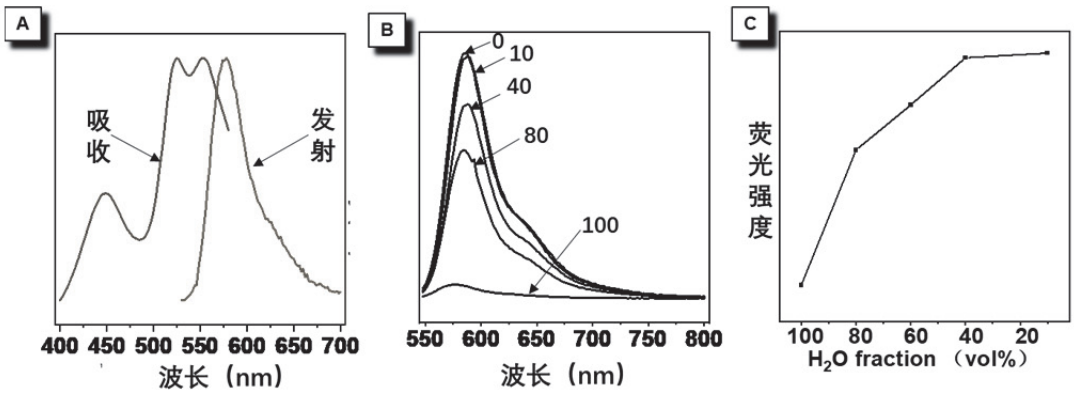
A
吸收
发射
400 450 500 550 600 650 700
波长（nm）
B
0
10
40
80
100
550 600 650 700 750 800
波长（nm）
C
荧光强度
100 80 60 40 20
H2O fraction （vol%）

图 8

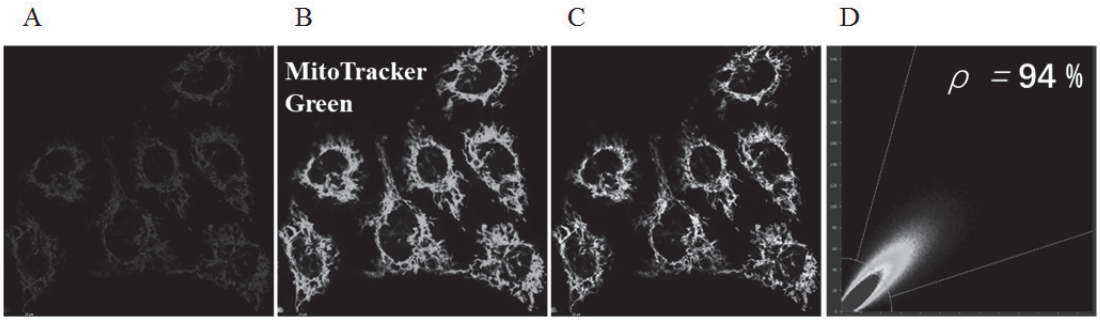
A
B
C
D
MitoTracker
Green
ρ = 94 %

图 9