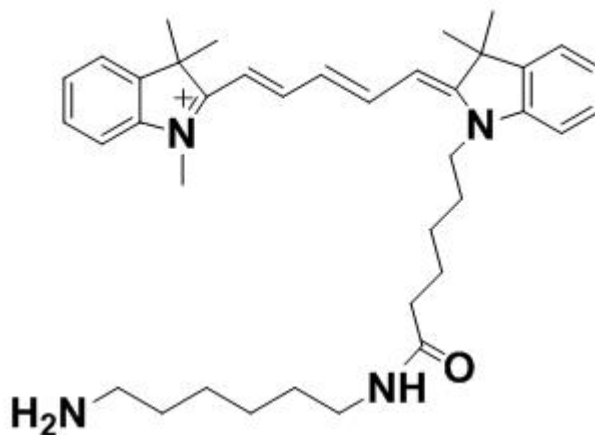


Certificate of Analysis

General properties:

Name: Cyanine5 Amine
Molecular Weight: 581.87Dalton
Cat.#: R-H-5330
Lot.#: R017FM3
Date of Analysis: 2017.03.05
Recommended Retest date: 2018.03.05
Stability: 12 months
Storage: -20°C in the dark

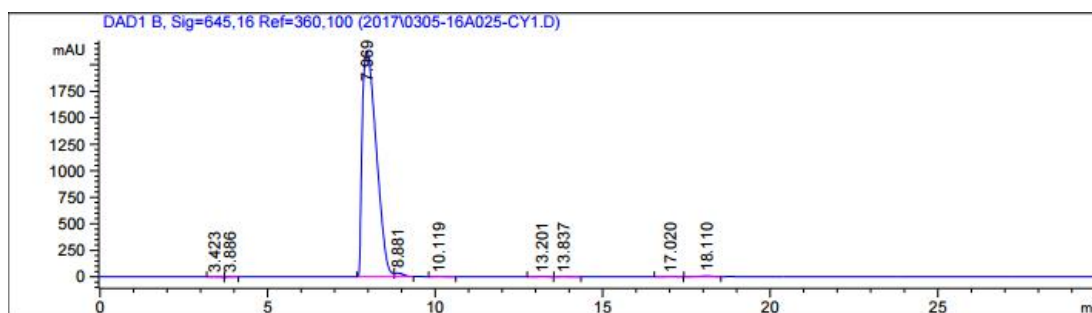
Structure



| Items | Specification | Results |
|--------------------|----------------------------|----------------------------|
| Appearance | Blue solid | Blue solid |
| ¹ H NMR | Identical to the structure | Identical to the structure |
| Foreign Material | None | None |
| Substitution | >95% | 98.35% |

Report Date: 2017.03.05

Attachment 1: HPLC

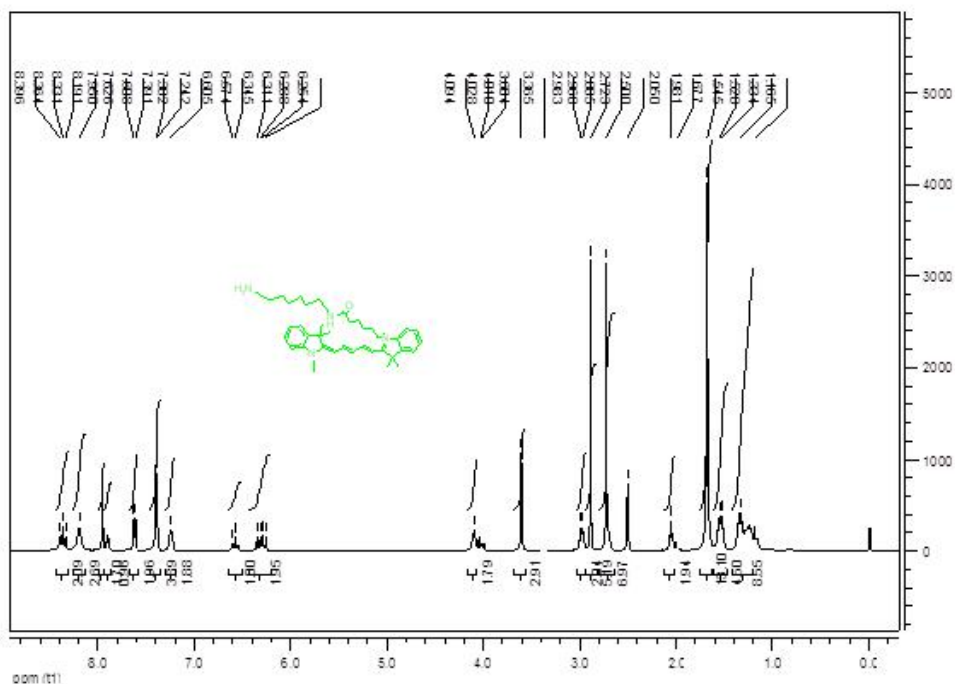


信号 2: DAD1 B, Sig=645,16 Ref=360,100

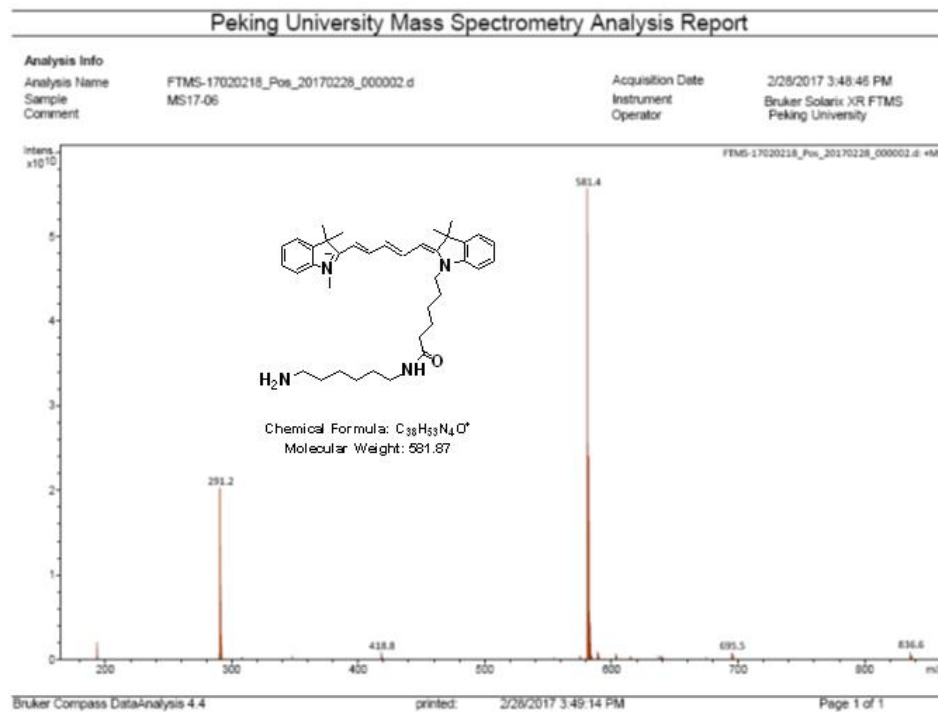
| 峰 # | 保留时间 [min] | 类型 | 峰宽 [min] | 峰面积 [mAU*s] | 峰高 [mAU] | 峰面积 % |
|-----|------------|----|----------|-------------|------------|---------|
| 1 | 3.423 | BB | 0.2660 | 38.29098 | 2.10684 | 0.0609 |
| 2 | 3.886 | BB | 0.1700 | 20.51692 | 1.73455 | 0.0326 |
| 3 | 7.969 | BV | 0.4682 | 6.18913e4 | 2122.49902 | 98.3965 |
| 4 | 8.881 | VB | 0.2712 | 584.98840 | 33.58101 | 0.9300 |
| 5 | 10.119 | BB | 0.3347 | 36.02886 | 1.67659 | 0.0573 |
| 6 | 13.201 | BB | 0.2664 | 59.33045 | 3.42047 | 0.0943 |
| 7 | 13.837 | BB | 0.2759 | 31.14090 | 1.73089 | 0.0495 |
| 8 | 17.020 | BB | 0.3128 | 64.77611 | 3.19073 | 0.1030 |
| 9 | 18.110 | BB | 0.3842 | 173.54431 | 6.74403 | 0.2759 |

总量 : 6.28999e4 2176.68413

Attachment 2: ¹H-NMR (400MHz, d⁶-DMSO)



Attachment 5: MS-ESI



This product is for research use only, Not for human or animal use