

# Analytical Data Sheet

Lot number

**0559293**

not for drug use

|                                |  |
|--------------------------------|--|
| <b>Catalog Number</b>          | <b>B-2580.1000</b>   |
| <b>Product number</b>          | <b>4025693.1000</b>  |
| <b>Product</b>                 | <b>Fmoc-Lys(biotinyl-ε-aminocaproyl)-OH</b>                    |
| <b>Molecular formula</b>       | <b>C<sub>37</sub>H<sub>49</sub>N<sub>5</sub>O<sub>7</sub>S</b> |
| <b>Relative molecular mass</b> | <b>707.89</b>  |

| Tests                                      | Results   |        |       |            |            |           |           |           |           |
|--|---|--------|-------|------------|------------|-----------|-----------|-----------|-----------|
| <b>Appearance</b>                          | white powder  |        |       |            |            |           |           |           |           |
| <b>Appearance of solution</b>              | clear, colorless solution<br>(50 mg/ml in dimethylformamide)  |        |       |            |            |           |           |           |           |
| <b>Identification (elemental analysis)</b> | <table border="0"> <tr> <td>Theory</td> <td>Found</td> </tr> <tr> <td>C = 61.8 %</td> <td>C = 61.8 %</td> </tr> <tr> <td>H = 7.1 %</td> <td>H = 7.0 %</td> </tr> <tr> <td>N = 9.8 %</td> <td>N = 9.9 %</td> </tr> </table> <p>calc. x 0.05 acetone (0.4 %) x 0.1 DMF (1.0 %) x 0.6 H<sub>2</sub>O (1.6 %)</p> | Theory | Found | C = 61.8 % | C = 61.8 % | H = 7.1 % | H = 7.0 % | N = 9.8 % | N = 9.9 % |
| Theory                                     | Found   |        |       |            |            |           |           |           |           |
| C = 61.8 %                                 | C = 61.8 %  |        |       |            |            |           |           |           |           |
| H = 7.1 %                                  | H = 7.0 %   |        |       |            |            |           |           |           |           |
| N = 9.8 %                                  | N = 9.9 %   |        |       |            |            |           |           |           |           |
| <b>Identification (TLC)</b>                | complies with authentic material  |        |       |            |            |           |           |           |           |
| <b>Purity (HPLC)</b>                       | 96.8% (TFA, 260 nm)   |        |       |            |            |           |           |           |           |
| <b>Purity (TLC)</b>                        | > 98%   |        |       |            |            |           |           |           |           |
| <b>TLC conditions</b>                      | chloroform/methanol/acetic acid 77.5/15/7.5<br>chloroform/methanol/benzene/H <sub>2</sub> O 8/8/8/1<br>chloroform/methanol/acetic acid/H <sub>2</sub> O 45/13/1/2<br>plate: silicagel 60 F <sub>254</sub><br>detected by: UV, ninhydrin, chlorine-tolidine  |        |       |            |            |           |           |           |           |
| <b>Water content (KF volumetric)</b>       | 1.6%  |        |       |            |            |           |           |           |           |
| <b>Residual organic solvents (GC)</b>      | 1.0% dimethylformamide<br>0.4% acetone  |        |       |            |            |           |           |           |           |
| Latest update: October 25, 2008            | <b>Analytical Data Sheet</b><br>Lot number <b>0559293</b>   |        |       |            |            |           |           |           |           |