

# Analytical Data Sheet

Lot number

## 1016504

not for drug use

|                                |  |
|--------------------------------|--|
| <b>Catalog Number</b>          | L-1885.0250  |
| <b>Product number</b>          | 4026051.0250   |
| <b>Product</b>                 | H- D- Val- Leu- Arg- pNA · 2 AcOH  |
| <b>Molecular formula</b>       | C <sub>23</sub> H <sub>38</sub> N <sub>8</sub> O <sub>5</sub> · 2 C <sub>2</sub> H <sub>4</sub> O <sub>2</sub> |
| <b>Relative molecular mass</b> | 626.71   |

| Tests                                      | Results  |        |       |             |             |            |            |             |             |
|--|--|--------|-------|-------------|-------------|------------|------------|-------------|-------------|
| <b>Appearance</b>                          | pale yellow powder   |        |       |             |             |            |            |             |             |
| <b>Appearance of solution</b>              | clear, colorless solution (10 mg/ml in water)  |        |       |             |             |            |            |             |             |
| <b>Identification (FAB-MS)</b>             | [M + H] <sup>+</sup> : m/z = 507.3 u   |        |       |             |             |            |            |             |             |
| <b>Identification (elemental analysis)</b> | <table border="0"> <tr> <td>Theory</td> <td>Found</td> </tr> <tr> <td>C = 50.20 %</td> <td>C = 49.77 %</td> </tr> <tr> <td>H = 7.50 %</td> <td>H = 7.33 %</td> </tr> <tr> <td>N = 17.22 %</td> <td>N = 17.24 %</td> </tr> </table> | Theory | Found | C = 50.20 % | C = 49.77 % | H = 7.50 % | H = 7.33 % | N = 17.22 % | N = 17.24 % |
| Theory                                     | Found  |        |       |             |             |            |            |             |             |
| C = 50.20 %                                | C = 49.77 %  |        |       |             |             |            |            |             |             |
| H = 7.50 %                                 | H = 7.33 %   |        |       |             |             |            |            |             |             |
| N = 17.22 %                                | N = 17.24 %  |        |       |             |             |            |            |             |             |
| <b>Purity (HPLC)</b>                       | 99.1 % (TFA)<br>98.7 % (NaClO <sub>4</sub> )   |        |       |             |             |            |            |             |             |
| <b>Purity (TLC)</b>                        | > 98%  |        |       |             |             |            |            |             |             |
| <b>TLC conditions</b>                      | chloroform/methanol/acetic acid 32% 5/3/1<br>n-butanol/acetic acid/H <sub>2</sub> O 4/2/2<br>plate: silicagel 60 F <sub>254</sub><br>detected by: UV, ninhydrin, potassium iodidestarch  |        |       |             |             |            |            |             |             |
| <b>Water content (KF volumetric)</b>       | 2.5%   |        |       |             |             |            |            |             |             |
| <b>Acetic acid content (HPLC)</b>          | 19.2%  |        |       |             |             |            |            |             |             |
| <b>General comment</b>                     | protect from light   |        |       |             |             |            |            |             |             |
| Latest update: March 11, 2010              |  |        |       |             |             |            |            |             |             |