

# Analytical Data Sheet

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|--------------------------------|---|
| <b>Lot number</b>              | <b>7001431</b><br>not for drug use  |
| <b>Product number</b>          | <b>H-3076</b>   |
| <b>Product</b>                 | <b>Calcitonin N-Terminal Flanking Peptide (human)</b><br>H-Ala-Pro-Phe-Arg-Ser-Ala-Leu-Glu-Ser-Ser-Pro-Ala-Asp-Pro-Ala-Thr-Leu-Ser-Glu-Asp-Glu-Ala-Arg-Leu-Leu-Leu-Ala-Ala-Leu-Val-Gln-Asp-Tyr-Val-Gln-Met-Lys-Ala-Ser-Glu-Leu-Glu-Gln-Glu-Gln-Glu-Arg-Glu-Gly-Ser-Ser-Leu-Asp-Ser-Pro-Arg-Ser-OH |
| <b>Molecular formula</b>       | C <sub>264</sub> H <sub>426</sub> N <sub>74</sub> O <sub>97</sub> S <sub>1</sub>  |
| <b>Relative molecular mass</b> | 6220.8  |

| Tests                            | Results  |      |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|----------------------------------|--|------|-----|-----|-----|-----|-----|------|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <b>Appearance</b>                | White powder   |      |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| <b>Salt form</b>                 | Trifluoroacetate   |      |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| <b>Identification (ESI-MS)</b>   | 6220.3 Da (average mass)   |      |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| <b>Solubility</b>                | Clear and colorless solution at 1 mg/mL in 0.1% TFA  |      |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| <b>Amino acid analysis</b>       | <table border="0"> <tr><td>Asx</td><td>3.9</td><td>(4)</td></tr> <tr><td>Thr</td><td>1.0</td><td>(1)</td></tr> <tr><td>Ser*</td><td>7.7</td><td>(9)</td></tr> <tr><td>Glx</td><td>12.4</td><td>(12)</td></tr> <tr><td>Pro</td><td>4.1</td><td>(4)</td></tr> <tr><td>Gly</td><td>1.0</td><td>(1)</td></tr> <tr><td>Ala</td><td>7.8</td><td>(8)</td></tr> <tr><td>Val</td><td>2.0</td><td>(2)</td></tr> <tr><td>Met</td><td>detected</td><td>(1)</td></tr> <tr><td>Leu</td><td>7.7</td><td>(8)</td></tr> <tr><td>Tyr</td><td>1.0</td><td>(1)</td></tr> <tr><td>Phe</td><td>1.0</td><td>(1)</td></tr> <tr><td>Lys</td><td>1.0</td><td>(1)</td></tr> <tr><td>Arg</td><td>4.2</td><td>(4)</td></tr> </table> <p>*May be partially destroyed during acid hydrolysis.</p> | Asx  | 3.9 | (4) | Thr | 1.0 | (1) | Ser* | 7.7 | (9) | Glx | 12.4 | (12) | Pro | 4.1 | (4) | Gly | 1.0 | (1) | Ala | 7.8 | (8) | Val | 2.0 | (2) | Met | detected | (1) | Leu | 7.7 | (8) | Tyr | 1.0 | (1) | Phe | 1.0 | (1) | Lys | 1.0 | (1) | Arg | 4.2 | (4) |
| Asx                              | 3.9  | (4)  |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Thr                              | 1.0  | (1)  |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Ser*                             | 7.7  | (9)  |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Glx                              | 12.4   | (12) |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Pro                              | 4.1  | (4)  |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Gly                              | 1.0  | (1)  |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Ala                              | 7.8  | (8)  |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Val                              | 2.0  | (2)  |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Met                              | detected   | (1)  |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Leu                              | 7.7  | (8)  |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Tyr                              | 1.0  | (1)  |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Phe                              | 1.0  | (1)  |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Lys                              | 1.0  | (1)  |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Arg                              | 4.2  | (4)  |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| <b>Purity (HPLC)</b>             | ≥ 98%  |      |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| <b>Peptide content</b>           | 83.9%  |      |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Latest update: November 21, 2013 | <b>Analytical Data Sheet</b><br>Lot number <b>7001431</b>  |      |     |     |     |     |     |      |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |