

## 4382-s $\beta$ -Defensin-3 (Human) (Typical Assay)

Gly-Ile-Ile-Asn-Thr-Leu-Gln-Lys-Tyr-Tyr-Cys-Arg-Val-Arg-Gly-Gly-Arg-Cys-Ala-Val-Leu-Ser-Cys-Leu-Pro-Lys-Glu-Glu-Gln-Ile-Gly-Lys-Cys-Ser-Thr-Arg-Gly-Arg-Lys-Cys-Cys-Arg-Arg-Lys-Lys (disulfide bonds between Cys<sup>11</sup>-Cys<sup>40</sup>, Cys<sup>18</sup>-Cys<sup>33</sup> and Cys<sup>23</sup>-Cys<sup>41</sup>)

M.W. 5155.11

C<sub>216</sub>H<sub>371</sub>N<sub>75</sub>O<sub>59</sub>S<sub>6</sub>

**Appearance:** white amorphous powder

**Specific optical rotation:**  $[\alpha]^{21}_D - 55.4^\circ$  (C\* 0.13; 1% AcOH)

calculated from net weight

**Elemental Analysis:**

Calculated for C<sub>216</sub>H<sub>371</sub>N<sub>75</sub>O<sub>59</sub>S<sub>6</sub> x 11 AcOH x 24 H<sub>2</sub>O

calc. C: 45.75 H: 7.47 N: 16.81

found: C: 45.73 H: 7.45 N: 16.82

**Amino Acid Analysis:**

6N HCl, 110 °C, 22 h \* 6N HCl, 150 °C, 4 h

Asp (1) 1.01 Thr (2) 1.92 Ser (2) 1.90 Glu (4) 4.08

Pro (1) 1.04 Gly (5) 4.90 Ala (1) 1.00 Cys (6) 3.78

Val (2) 1.95 Ile (3) 2.66\* Leu (3) 2.99 Tyr (2) 1.66

Lys (6) 5.91 NH<sub>3</sub> (3) 3.56 Arg (7) 6.84

**TLC:**

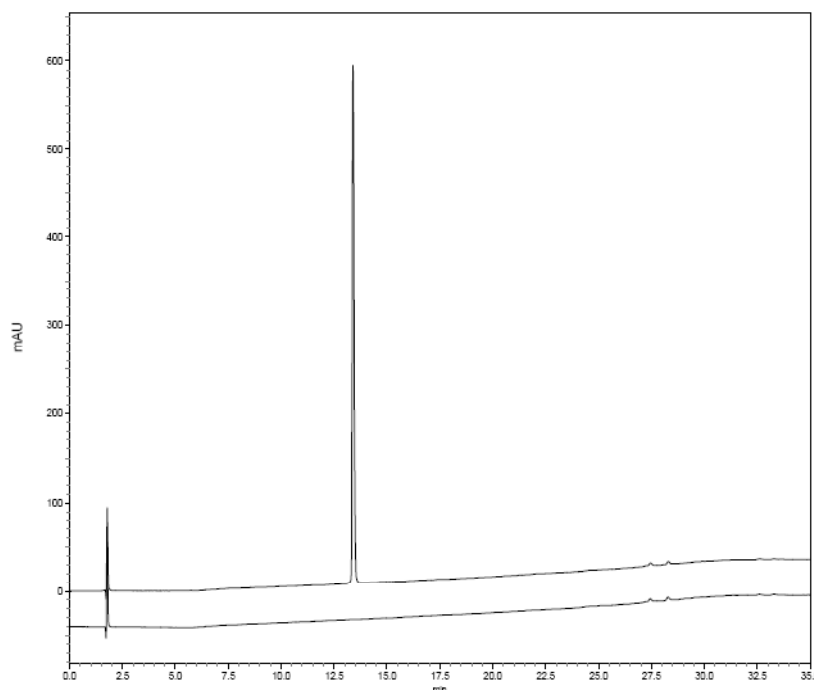
single spot

**Cellulose Layer**

Application: 50  $\mu$ g

Solvent System: n-BuOH : AcOH : H<sub>2</sub>O : Pyridine = 15:3:12:10

Located by Ninhydrin and Pauly reagent



Sample Size: 1.6  $\mu$ l (0.1 mg / 20  $\mu$ l | 1% HAc)

Column: YMC Pack ODS A-302 (4.6 mm ID x 150 mm)

Detection 210 nm

**$\beta$ -Defensin-3 is sold for research purposes only and not for use in humans**

[www.peptanova.de/products/Biologically-Active-Peptides/Defensin-and-LL-37/Beta-Defensin-3-Human.html](http://www.peptanova.de/products/Biologically-Active-Peptides/Defensin-and-LL-37/Beta-Defensin-3-Human.html)