

| PRODUCT NAME                                                     | CATALOG NO.                                   | LOT NO.                                             | GRADE          |
|------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------|----------------|
| <b>LL-37</b>                                                     | [SWK-026]                                     | [SK-LL37-240426]                                    | Research Grade |
| DESCRIPTION                                                      | FORMAT                                        | QUANTITY                                            | CAS NO.        |
| LLGDFFRKSKEKIGKEFKRIVQ<br>RIKDFLRNLPRTES —<br>human cathelicidin | Pre-loaded StabPen™ · 300<br>calibrated units | [e.g. 10mg / pen]                                   | [597562-32-8]  |
| MANUFACTURE DATE                                                 | EXPIRY DATE                                   | STORAGE                                             |                |
| 2026-04-01                                                       | 2027-04-01                                    | 2–8°C (refrigerated) · Protect<br>from direct light |                |

### PURITY ANALYSIS

| Test              | Method                                       | Specification                       | Result                                                       | Status |
|-------------------|----------------------------------------------|-------------------------------------|--------------------------------------------------------------|--------|
| HPLC Purity       | Reverse-phase HPLC ·<br>C18 column, UV 220nm | ≥99.0%                              | [99.1502%]                                                   | ✓ PASS |
| Mass Spectrometry | ESI-MS / MALDI-TOF ·<br>±0.5 Da tolerance    | MW confirmed · Identity<br>verified | [Observed mass<br>matches theoretical]<br>Identity confirmed | ✓ PASS |
| Peptide Content   | AAA — Amino Acid<br>Analysis                 | ≥95.0% (dry weight)                 | [97.7120%]                                                   | ✓ PASS |
| Water Content     | Karl Fischer Titration                       | ≤10.0%                              | [0.7412%]                                                    | ✓ PASS |
| Residual TFA      | Ion Chromatography                           | ≤0.5%                               | [<0.3299%]                                                   | ✓ PASS |

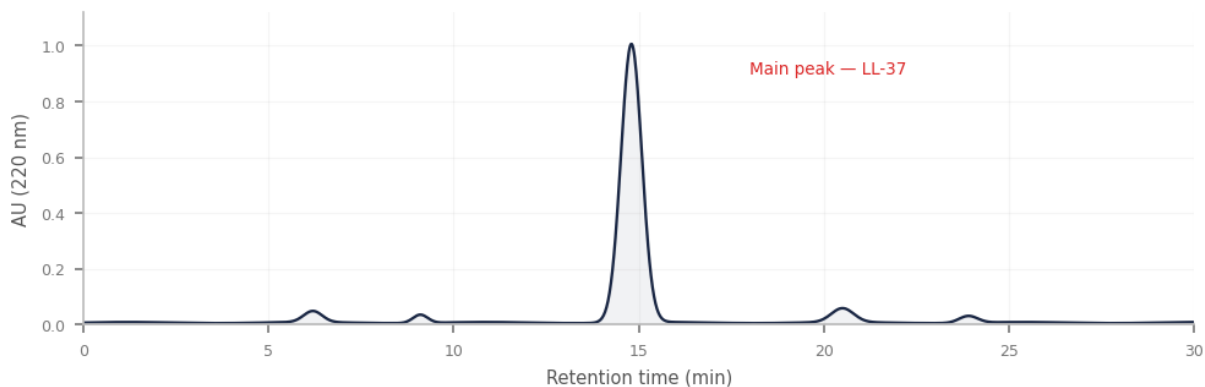
### ENDOTOXIN TESTING — LAL METHOD

| Test            | Method                                         | Specification                              | Result          | Status |
|-----------------|------------------------------------------------|--------------------------------------------|-----------------|--------|
| Endotoxin Level | LAL Kinetic<br>Turbidimetric (BET)             | <0.50 EU/mg · USP<br><85> / Ph.Eur. 2.6.14 | [<0.2612 EU/mg] | ✓ PASS |
| Sterility Test  | 0.22µm sterile filtration +<br>membrane filter | No microbial growth                        | Negative        | ✓ PASS |
| Bioburden       | USP <61> / Ph.Eur.<br>2.6.12                   | <10 CFU/g                                  | [<10 CFU/g]     | ✓ PASS |

### HPLC CHROMATOGRAM

**Column:** C18, 250×4.6mm, 5µm · Mobile Phase A: 0.1% TFA in  
H<sub>2</sub>O · Mobile Phase B: 0.1% TFA in Acetonitrile

**Gradient:** 5→65% B over 30 min · Flow 1.0 mL/min · UV 220nm ·  
Injection 10µL · Column temp 40°C



HPLC CHROMATOGRAM — LL-37 | 2026-04-13 Main Peak: [>98%] Peak Area %: [>98%] Symmetry Factor: [≤1.5]

### PHYSICAL & CHEMICAL PROPERTIES

| Property         | Specification                                            | Result               | Status |
|------------------|----------------------------------------------------------|----------------------|--------|
| Appearance       | White to off-white lyophilised powder                    | White powder         | ✓ PASS |
| Solubility       | Soluble in aqueous buffer (PBS pH 7.4 or acetate pH 4.5) | Fully soluble        | ✓ PASS |
| pH (1mg/mL)      | PBS: 6.8–7.6 / Acetate: 4.0–5.0                          | [7.0]                | ✓ PASS |
| Molecular Weight | Per theoretical MW $\pm 0.5$ Da                          | [4493.3 g/mol]       | ✓ PASS |
| Osmolality       | 270–315 mOsm/kg (isotonic range)                         | Conforms to expected | ✓ PASS |

### STABILITY DATA — StabPen™ SSS Format

| Condition            | Duration           | Purity Retained                          | Status  |
|----------------------|--------------------|------------------------------------------|---------|
| 2–8°C (refrigerated) | 12 months          | ≥97% integrity confirmed by HPLC         | ✓ VALID |
| Room temp 20–25°C    | 30 days            | ≥95% integrity                           | ✓ VALID |
| -20°C (frozen)-20°C  | Not recommended    | Solvent phase separation may occur       | ⚠ N/A   |
| Light Exposure       | Avoid direct light | Store in original packaging at all times | ⚠ NOTE  |

### OVERALL RESULT

✓ CONFORMS TO SPECIFICATION

### AUTHORIZATION

| Quality Control Analyst                                                                               | Quality Director                                                                                     | Document Date | Document No.          |
|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------|-----------------------|
| <br>Schmid, Daniel | <br>Keller, Peter | [13.04.2026]  | SWK-CoA-240426-202604 |

⚠ RESEARCH USE ONLY — NOT FOR HUMAN OR VETERINARY USE

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