Hello Bio. Inc. 304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500 F. 609-228-4994

customercare-usa@hellobio.com



DATASHEET

LL-37 (human)

Product overview

Name LL-37 (human) Cat No HB4444

Biological description Cell permeable antimicrobial host defense peptide derived from the C-terminal of human cathelicidin.

Acts on host cells to exert immunomodulatory functions as part of its role in host defense and immunity. Mediates chemotaxis, promotes wound healing, angiogenesis and induces tumorigenic effects in

Recently shown to reduce SARS-CoV-2 infection by blocking the S1 spike protein RBD (receptor binding domain) ($K_d = 11.2 \text{ nM}$). LL-37 inhibits SARS-CoV-2 pseudovirion infection ($IC_{50} = 4.74$ μ g/mL) in vitro and in vivo and also binds to ACE2 (K_d = 25.5 nM) to cloak the LBD (ligand binding domain) to decrease S1 adherence and protect cells against pseudovirion infection in vitro.

Displays antimicrobial, antibacterial, antitumour, anti-cancer and antiviral activities.

Control Peptide also available.

Alternative names Biological action

Purity Description Ropocamptide, hCAP 18, Cathelicidin

Peptide >95%

Antimicrobial peptide. Reduces SARS-Cov2 infection.

Solubility & Handling

Storage instructions

Solubility overview Soluble in aqueous buffer (1 mg/ml), and in DMSO

Storage of solutions Prepare and use solutions on the same day if possible. Store solutions at -20 °C for up to one month if

storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.

Stable for ambient temperature shipping. Follow storage instructions on receipt.

Shipping Conditions Important

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

for human or veterinary use

Chemical Data

Molecular Weight Molecular Formula $C_{205}H_{340}N_{60}O_{53}$

LLGDFFRKSKEKIGKEFKRIVQRIKDFLRNLVPRTES Sequence (one letter)

H-Leu-Leu-Gly-Asp-Phe-Phe-Arg-Lys-Ser-Lys-Glu-Lys-IIe-Gly-Lys-Glu-Phe-Lys-Arg-IIe-Val-Gln-Arg-Sequence (three letter)

Ile-Lys-Asp-Phe-Leu-Arg-Asn-Leu-Val-Pro-Arg-Thr-Glu-Ser-OH

CAS Number 154947-66-7 PubChem identifier 16198951

POIUWJQBRNEFGX-XAMSXPGMSA-N InChiKey

References

Spotlight on Human LL-37, an Immunomodulatory Peptide with Promising Cell-Penetrating Properties

Seil et al (2010) Pharmaceuticals (Basel). 3(11)

Human Cathelicidin Inhibits SARS-CoV-2 Infection: Killing Two Birds with One Stone

Wang C *et al* (2021) ACS Infect Dis 7(6) **PubMedID**33849267