

## Data Sheet

<b>Product Name:</b>	LL-37, human (TFA)	
<b>Cat. No.:</b>	CS-0097770	
<b>Molecular Formula:</b>	C <sub>205</sub> H <sub>340</sub> N <sub>60</sub> O <sub>53</sub> ·C <sub>2</sub> HF <sub>3</sub> O <sub>2</sub>	
<b>Molecular Weight:</b>	4607.28	
<b>Target:</b>	Bacterial	LLGDFFRKS K EKIGKEFKRI VQRIKDFLRN LVPRTES (TFA salt)
<b>Pathway:</b>	Anti-infection	
<b>Solubility:</b>	H <sub>2</sub> O : 100 mg/mL (21.70 mM; Need ultrasonic)	

### BIOLOGICAL ACTIVITY:

LL-37, human TFA is a 37-residue, amphipathic, cathelicidin-derived antimicrobial peptide, which exhibits a broad spectrum of antimicrobial activity. LL-37, human TFA could help protect the cornea from infection and modulates wound healing<sup>[1][2][3]</sup>. **In Vitro:** LL-37, human TFA (1-20 µg/mL; 24 h) affects HCECs migration<sup>[2]</sup>.

LL-37, human TFA (0.0001-5 µg/mL; 6-24 h) affects cytokine secretion in HCECs<sup>[2]</sup>.

LL-37, human TFA (1-100 µg/mL; 24 h) shows dose-dependently cytotoxic to HCECs at concentrations over 10 µg/mL<sup>[2]</sup>. **In Vivo:** LL-37, human TFA (0.4-2.0 mg/kg; intratracheal injection once) ameliorates MRSA-induced pneumonia of mice<sup>[3]</sup>.

### References:

- [1]. Dürr UH, et al. LL-37, the only human member of the cathelicidin family of antimicrobial peptides. *Biochim Biophys Acta*. 2006 Sep;1758(9):1408-25.
- [2]. Huang LC, et al. Multifunctional roles of human cathelicidin (LL-37) at the ocular surface. *Invest Ophthalmol Vis Sci*. 2006 Jun;47(6):2369-80.
- [3]. Hou M, et al. Antimicrobial peptide LL-37 and IDR-1 ameliorate MRSA pneumonia in vivo. *Cell Physiol Biochem*. 2013;32(3):614-23.

### CAIndexNames:

L-Serine, L-leucyl-L-leucylglycyl-L-α-aspartyl-L-phenylalanyl-L-phenylalanyl-L-arginyl-L-lysyl-L-seryl-L-lysyl-L-α-glutamyl-L-lysyl-L-isoleucylglycyl-L-lysyl-L-α-glutamyl-L-phenylalanyl-L-lysyl-L-arginyl-L-isoleucyl-L-valyl-L-glutamyl-L-arginyl-L-isoleucyl-L-lysyl-L-α-aspartyl-L-phenylalanyl-L-leucyl-L-arginyl-L-asparagyl-L-leucyl-L-valyl-L-prolyl-L-arginyl-L-threonyl-L-α-glutamyl-, TFA

### SMILES:

[LLGDFFRKS K EKIGKEFKRI VQRIKDFLRN LVPRTES (TFA salt)]

**Caution: Product has not been fully validated for medical applications. For research use only.**

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