

## **Product** Data Sheet

## Api137 TFA

Cat. No.: HY-P5723A

Molecular Formula:  $C_{104}H_{171}N_{37}O_{22}.xC_2HF_3O_2$ 

 $Sequence: \qquad N,N,N',N'-Tetramethylguanidino-\{Orn\}-Asn-Asn-Arg-Pro-Val-Tyr-Ile-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Arg-Pro-Ar$ 

ro-Pro-His-Pro-Arg-Leu

N,N,N',N'-Tetramethylguanidino-{Orn}-NNRPVYIPRPRPPHPRL

Pro-Arg-Pro-Pro-His-Pro-Arg-Leu (TFA

Asn-Asn-Arg-Pro-Val-Tyr-Ile-Pro-Arg-

salt)

Target: Bacterial

Sequence Shortening:

Pathway: Anti-infection

Storage: Sealed storage, away from moisture

Powder -80°C 2 years

-20°C 1 year

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

## **BIOLOGICAL ACTIVITY**

Description

Api137 TFA is an antimicrobial peptide that interferes with bacterial growth by inhibiting translation. Api137 TFA inhibits protein synthesis by trapping of release factors on the 70S ribosome following hydrolysis of the nascent polypeptide chain<sup>[1]</sup>
[2]

## **REFERENCES**

[1]. Florin T, et, al. An antimicrobial peptide that inhibits translation by trapping release factors on the ribosome. Nat Struct Mol Biol. 2017 Sep;24(9):752-757.

[2]. Graf M, et, al. Intracellular Antimicrobial Peptides Targeting the Protein Synthesis Machinery. Adv Exp Med Biol. 2019:1117:73-89.

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

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