Histatin-3

Cat. No.: HY-P5272

CAS No.: 112844-49-2

Molecular Formula: $C_{178}H_{258}N_{64}O_{48}$

Molecular Weight: 4062.35

Sequence: Asp-Ser-His-Ala-Lys-Arg-His-His-Gly-Tyr-Lys-Arg-Lys-Phe-His-Glu-Lys-His-His-Ser-His-Arg-Gly-Tyr-Arg-Ser-Asn-Tyr-Leu-Tyr-Asp-Asn

DSHAKRHHGYKRKFHEKHHSHRGYRSNYLYDN

Sequence Shortening: DSHAKRHHGYKRKFHEKHHSHRGYRSNYLYDN

Target: Bacterial

Pathway: Anti-infection

Storage: Sealed storage, away from moisture and light

Powder -80°C 2 years

-20°C 1 year

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

SOLVENT & SOLUBILITY

In Vitro

H_2O : 50 mg/mL (12.31 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	0.2462 mL	1.2308 mL	2.4616 mL
	5 mM	0.0492 mL	0.2462 mL	0.4923 mL
	10 mM	0.0246 mL	0.1231 mL	0.2462 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Histatin-3, a 32 amino acid peptide, possesses powerful antimicrobial properties. Histatin-3 behaves as a substrate for proprotein convertase 1 (PC1), being cleaved by this endoprotease primarily at a site carboxy terminal to the single Arg25 residue (HRGYR decrease SN). Histatin-3 is a moderately potent, reversible and competitive inhibitor of the furin-mediated cleavage of the pentapeptide pGlu-Arg-Thr-Lys-Arg-MCA fluorogenic substrate, with an estimated inhibition constant K_i of 1.98 μM[1].

REFERENCES

[1]. A Basak, et al. Histidine-rich human salivary peptides are inhibitors of proprotein convertases furin and PC7 but act as substrates for PC1. J Pept Res. 1997 Jun;49(6):596-603.

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