

187-1, N-WASP inhibitor

Cat. No.:	HY-P1045
CAS No.:	380488-27-7
Molecular Formula:	C ₉₆ H ₁₂₂ N ₁₈ O ₁₆
Molecular Weight:	1784.11
Sequence:	Cyclo[K-(d-Phe)-(d-Pro)-(d-Phe)-Phe-(d-Pro)-Gln-Lys-(d-Phe)-(d-Pro)-(d-Phe)-Phe-(d-Pro]] Cyclo[K-(d-Phe)-(d-Pro)-(d-Phe)-F-(d-Pro)-Q]2
Sequence Shortening:	Cyclo[QK-(d-Phe)-(d-Pro)-(d-Phe)-F-(d-Pro)-QK-(d-Phe)-(d-Pro)-(d-Phe)-F-(d-Pro]]
Target:	Arp2/3 Complex
Pathway:	Cytoskeleton
Storage:	Sealed storage, away from moisture and light, under nitrogen 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, under nitrogen)

SOLVENT & SOLUBILITY

In Vitro

H₂O : 50 mg/mL (28.03 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	0.5605 mL	2.8025 mL	5.6050 mL
5 mM	0.1121 mL	0.5605 mL	1.1210 mL
10 mM	0.0561 mL	0.2803 mL	0.5605 mL

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

BIOLOGICAL ACTIVITY

Description

187-1, N-WASP inhibitor, a 14-aa cyclic peptide, is an allosteric neural Wiskott-Aldrich syndrome protein (N-WASP) inhibitor. 187-1, N-WASP inhibitor potently inhibits actin assembly induced by phosphatidylinositol 4,5-bisphosphate (PIP2) with an IC₅₀ of 2 μM. 187-1, N-WASP inhibitor prevents the activation of Arp2/3 complex by N-WASP by stabilizing the autoinhibited state of the protein^{[1][2]}.

REFERENCES

[1]. Peterson, et al. A chemical inhibitor of N-WASP reveals a new mechanism for targeting protein interactions. Proc Natl Acad Sci U S A. 2001 Sep 11;98(19):10624-9.

[2]. S Suetsugu, et al. Identification of another actin-related protein (Arp) 2/3 complex binding site in neural Wiskott-Aldrich syndrome protein (N-WASP) that complements actin polymerization induced by the Arp2/3 complex activating (VCA) domain of N-WASP. J

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

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