## **Product** Data Sheet

HSDAVFTDNYTRLRKQMAVKKYLNSILN-NH2 (acetate salt)

# **Aviptadil acetate**

Cat. No.: HY-P0012A CAS No.: 1444827-29-5

Molecular Formula:  $C_{147}H_{238}N_{44}O_{42}S.C_{2}H_{4}O_{2}$ 

Molecular Weight:

Sequence Shortening: HSDAVFTDNYTRLRKQMAVKKYLNSILN-NH2

Target: SARS-CoV 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

DMSO: 100 mg/mL (29.53 mM; Need ultrasonic) H<sub>2</sub>O: 100 mg/mL (29.53 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	0.2953 mL	1.4767 mL	2.9534 mL
	5 mM	0.0591 mL	0.2953 mL	0.5907 mL
	10 mM	0.0295 mL	0.1477 mL	0.2953 mL

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

In Vivo

- 1. Add each solvent one by one: PBS Solubility: 50 mg/mL (14.77 mM); Clear solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (0.74 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (0.74 mM); Suspended solution; Need ultrasonic
- 4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (0.74 mM); Clear solution

#### **BIOLOGICAL ACTIVITY**

Description

Aviptadil acetate is an analog vasoactive intestinal polypeptide (VIP) with potent vasodilatory effects. Aviptadil acetate induces pulmonary vasodilation and inhibits vascular SMCs proliferation, platelet aggregation. Aviptadil acetate can be used

	for the research of pulmonary fibrosis, pulmonary arterial hypertension (PAH) and SARS-CoV-2 caused respiratory failure, et $al^{[1]}$ .
In Vitro	Aviptadil acetate (1 nM-10 $\mu$ M) produces a concentration-dependent inhibition of CSE-induced cell death in L2 cells. At 10 $\mu$ M, Aviptadil acetate reduces CSE-stimulated MMP activity and caspase-3 activation in L2 cells <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### **CUSTOMER VALIDATION**

• Nucleic Acids Res. 2021 Jan 8;49(D1):D1113-D1121.

See more customer validations on  $\underline{www.MedChemExpress.com}$ 

#### **REFERENCES**

[1]. Intravenous Aviptadil for Critical COVID-19 With Respiratory Failure (COVID-AIV)

[2]. Jian Hu, et al. Novel Targets of Drug Treatment for Pulmonary Hypertension. Am J Cardiovasc Drugs

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

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