

Product Data Sheet

Thiorphan

Cat. No.:HY-W013375CAS No.:76721-89-6Molecular Formula: $C_{12}H_{15}NO_3S$ Molecular Weight:253.32Target:Neprilysin

Pathway: Metabolic Enzyme/Protease

Storage: -20°C, protect from light

* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

SOLVENT & SOLUBILITY

In Vitro

DMSO: 250 mg/mL (986.89 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.9476 mL	19.7379 mL	39.4758 mL
	5 mM	0.7895 mL	3.9476 mL	7.8952 mL
	10 mM	0.3948 mL	1.9738 mL	3.9476 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (8.21 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (8.21 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (8.21 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Thiorphan is a selective NEP (neprilysin) inhibitor with an IC_{50} of 6.9 $nM^{[1]}$.

REFERENCES

[1]. Whyteside AR, Turner AJ. Human neprilysin-2 (NEP2) and NEP display distinct subcellular localisations and substrate preferences. FEBS Lett. 2008 Jul 9;582(16):2382-6.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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