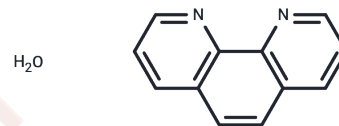


## o-Phenanthroline monohydrate

### Chemical Properties

CAS No. :	5144-89-8
Formula:	C <sub>12</sub> H <sub>10</sub> N <sub>2</sub> O
Molecular Weight:	198.22
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



### Biological Description

Description	o-Phenanthroline monohydrate (1, 10-Phenanthroline monohydrate) is an inhibitor of metallopeptidases, inhibits zinc-dependent hydrolysis of Fa-Gly-Leu-NH <sub>2</sub> by B. subtilis neutral protease and B. thermoproteolyticus thermolysin.
Targets(IC <sub>50</sub> )	MMP

### Solubility Information

Solubility	DMSO: 250 mg/mL (1261.22 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (10.09 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.0449 mL	25.2245 mL	50.449 mL
5 mM	1.009 mL	5.0449 mL	10.0898 mL
10 mM	0.5045 mL	2.5224 mL	5.0449 mL
50 mM	0.1009 mL	0.5045 mL	1.009 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Feder J , Garrett L R , Kochavi D . Studies on the inhibition of neutral proteases by 1,10-phenanthroline[J]. *Biochimica et Biophysica Acta*, 1971, 235(2):370-377.

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