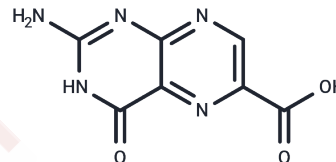


## Pterine-6-carboxylic acid

## Chemical Properties

CAS No. :	948-60-7
Formula:	C7H5N5O3
Molecular Weight:	207.15
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	Pterine-6-carboxylic acid (6-Carboxypterin) is a photodegradation product of folic acid, which can be used as a photosensitive agent to study the molecular mechanism of UVA breaking DNA structure.
Targets(IC50)	Others,DNA,PDE
In vitro	Pterin-6-carboxylic acid induces DNA photooxidation specifically at consecutive G residues through electron transfer[1]. Pterin-6-carboxylic acid bind to the active site of phosphodiesterase 5 with the binding energy value of -7.1 and 2.05A° 2.23A° when compared with other compound found in the plant. In silico studies hypothesized that pterin-6-carboxylic acid can be an inhibitory agent for PDE5 protein which could be a potential drug candidate for the treatment of erectile dysfunction[2].

## Solubility Information

Solubility	DMSO: Slightly soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.8274 mL	24.1371 mL	48.2742 mL
5 mM	0.9655 mL	4.8274 mL	9.6548 mL
10 mM	0.4827 mL	2.4137 mL	4.8274 mL
50 mM	0.0965 mL	0.4827 mL	0.9655 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

Hirakawa K, et al. Sequence-specific DNA damage induced by ultraviolet A-irradiated folic acid via its photolysis product. Arch Biochem Biophys. 2003 Feb 15;410(2):261-8.

Iheanyichukwu, Wopara, et al. Inhibition of Phosphodiesterase 5 Enzyme by Pterine- 6 Carboxylic Acid from Baphia nitida -Related to Erectile Dysfunction: Computational Kinetic. European journal of medicinal plants (2020): 49-55.

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