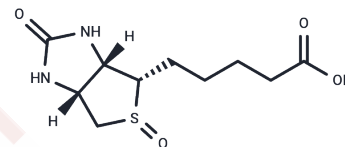


Biotin (S)-sulfoxide

Chemical Properties

CAS No. :	10406-89-0
Formula:	C ₁₀ H ₁₆ N ₂ O ₄ S
Molecular Weight:	260.31
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	Biotin (S)-sulfoxide is an inactive metabolite of the coenzyme biotin .1,2It has also been found inE. coliand is reduced by the biotin sulfoxide reduction system as a source of biotin.3
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: Slightly soluble Acetonitrile: 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	3.8416 mL	19.2079 mL	38.4157 mL
5 mM	0.7683 mL	3.8416 mL	7.6831 mL
10 mM	0.3842 mL	1.9208 mL	3.8416 mL
50 mM	0.0768 mL	0.3842 mL	0.7683 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

- Denkel, L.A., Rhen, M., and Bange, F.-C. Biotin sulfoxide reductase contributes to oxidative stress tolerance and virulence in *Salmonella enterica* serovar Typhimurium. *Microbiology (Reading)* 159(Pt 7):1447-1458 (2013)
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- Carling, R.S., and Turner, C. Methods for assessment of biotin (Vitamin B7). *Laboratory assessment of vitamin status* 193-217 (2019)
- del Campillo-Campbell, A., Dykhuizen, D., and Clearly, P.P. Enzymic reduction of d-biotin d-sulfoxide to d-biotin. *Methods Enzymol.* 62:379-385 (1979)

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