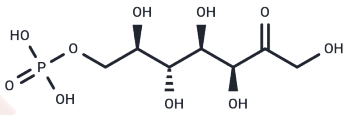
Data Sheet (Cat.No.T19268)

TargetMol

D-Sedoheptulose 7-phosphate

Chemical Properties



CAS No. : 2646-35-7

Formula: C7H15O10P

Molecular Weight: 290.16

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	D-Sedoheptulose 7-phosphate is a common precursor of heptaic acid (group III) and the heptasaccharide of hygromycin B (group IV). This compound can be converted to NDP-heptose via similar biosynthetic pathways present in these substances.
Targets(IC50)	Others,Endogenous Metabolite
In vitro	Sedoheptulose 7-phosphate (S-7-P) can be converted to ADP-L-glycero-β-D-manno-heptose by SepB, SepL, and SepC, involving ADP-sugar in microbial natural product biosynthesis. SepB, an S-7-P isomerase, and SepL, which is involved in the biosynthesis of heptoses in the core region of *E. coli* LPS, catalyze a four-reaction relay converting S-7-P into ADP-D-glycero-β-D-manno-heptose. Septacidin and its analogs are potential anticancer and pain-relief agents.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.4464 mL	17.2319 mL	34.4637 mL
5 mM	0.6893 mL	3.4464 mL	6.8927 mL
10 mM	0.3446 mL	1.7232 mL	3.4464 mL
50 mM	0.0689 mL	0.3446 mL	0.6893 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

Tang W, et al. d-Sedoheptulose-7-phosphate is a common precursor for the heptoses of septacidin and hygromycin B.Proc Natl Acad Sci U S A. 2018 Mar 13;115(11):2818-2823.

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