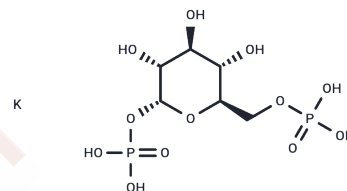


α-D-Glucose-1,6-bisphosphate (potassium salt hydrate)

Chemical Properties

CAS No. :	91183-87-8
Formula:	C6H10K4O12P2
Molecular Weight:	492.48
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	α-D-Glucose-1,6-bisphosphate is abis-phosphorylated derivative of α-D-glucose that has roles in carbohydrate metabolism.1It is the product of the reaction of glucose-1- or 6-phosphate with glucose-1,6-bisphosphate synthase (PGM2LI) in the conversion of 1,3-bisphosphoglycerate to 3-phosphoglycerate.2It is also a cofactor for the bacterial enzyme phosphopentomutase.3,4α-D-Glucose-1,6-bisphosphate has been used in the study of carbohydrate metabolism.
Targets(IC50)	Others

Solubility Information

Solubility	H2O: 50 mg/mL (101.53 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0305 mL	10.1527 mL	20.3054 mL
5 mM	0.4061 mL	2.0305 mL	4.0611 mL
10 mM	0.2031 mL	1.0153 mL	2.0305 mL
50 mM	0.0406 mL	0.2031 mL	0.4061 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

Beitner, R. Regulation of carbohydrate metabolism by glucose 1,6-bisphosphate in extrahepatic tissues; comparison with fructose 2,6-bisphosphate. *Int. J. Biochem.* 22(6)553-557(1990)

Maliekal, P., Sokolova, T., Vertommen, D., et al. Molecular identification of mammalian phosphopentomutase and glucose-1,6-bisphosphate synthase, two members of the α -D-phosphohexomutase family. *Biol. Chem.* 282(44) 31844-31851(2007)

Moustafa, H.M.A., Zaghloul, T.I., and Zhang, Y.-H.P. A simple assay for determining activities of phosphopentomutase from a hyperthermophilic bacterium *Thermotoga maritima*. *Anal. Biochem.* 50175-81(2016)

Panosian, T.D., Nannemann, D.P., Watkins, G.R., et al. *Bacillus cereus* phosphopentomutase is an alkaline phosphatase family member that exhibits an altered entry point into the catalytic cycle. *Biol. Chem.* 286(10)8043-8054(2011)

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