



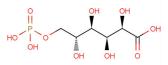
### 6-Phosphogluconic acid

## **Chemical Properties**

CAS No.: 921-62-0 Formula: C6H13O10P

Molecular Weight: 276.14
Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



# **Biological Description**

Description	6-Phosphogluconic acid is a potent and competitive phosphoglucose isomerase (PGI) inhibitor (Kis: 48 $\mu$ M for glucose 6-phosphate and 42 $\mu$ M for fructose 6-phosphate).	
Targets(IC <sub>50</sub> )	Human Endogenous Metabolite: None	
In vitro	6-Phosphogluconic acid (0.5-2.0 mM) completely inhibits the activity of PGI with glucose 6-phosphate (0.05-0.5 mM) as the substrate [1].	

# Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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#### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	3.621 mL	18.107 mL	36.214 mL
5 mM	0.724 mL	3.621 mL	7.243 mL
10 mM	0.362 mL	1.811 mL	3.621 mL
50 mM	0.072 mL	0.362 mL	0.724 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

#### Reference

- 1. Gaitonde MK, et al. Effect of 6-phosphogluconate on phosphoglucose isomerase in rat brain in vitro and in vivo. J Neurochem. 1989 May;52(5):1348-52.
- 2. Hitosugi T, et al. Phosphoglycerate mutase 1 coordinates glycolysis and biosynthesis to promote tumor growth. Cancer Cell. 2012 Nov 13;22(5):585-600.

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Tel:781-999-4286

E-mail:info@targetmol.com

Address:36 Washington Street, Wellesley Hills, MA 02481

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