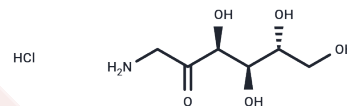


1-Amino-1-deoxy-D-fructose (hydrochloride)

Chemical Properties

CAS No. :	39002-30-7
Formula:	C ₆ H ₁₄ ClNO ₅
Molecular Weight:	215.63
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	1-Amino-1-deoxy-D-fructose is an amino monosaccharide. It induces site-specific DNA damage at pyrimidine residues in cell-free assays. 1-Amino-1-deoxy-D-fructose moieties have been found as a component of fructosamines, glycated serum proteins that are elevated in patients with conditions such as diabetes. ^{2,3}
Targets(IC50)	Others, Endogenous Metabolite

Solubility Information

Solubility	PBS (pH 7.2): 10 mg/mL (46.38 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	4.6376 mL	23.1879 mL	46.3757 mL
5 mM	0.9275 mL	4.6376 mL	9.2751 mL
10 mM	0.4638 mL	2.3188 mL	4.6376 mL
50 mM	0.0928 mL	0.4638 mL	0.9275 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

Nanjou, S., Fujii, S., Morita, J., et al. Sequence-specific alkali-labile lesions in DNA caused by β -isoglucoamine. *Biochim. Biophys. Acta* 866(1)44-52(1986)

Danese, E., Montagnana, M., Novenne, A., et al. Advantages and pitfalls of fructosamine and glycated albumin in the diagnosis and treatment of diabetes. *J. Diabetes Sci. Technol.* 9(2)169-176(2015)

Armbruster, D.A. Fructosamine: Structure, analysis, and clinical usefulness. *Clin. Chem.* 33(12)2153-2163(1987)

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