Data Sheet (Cat.No.T32116)

TargetMol

Hydroorotic acid

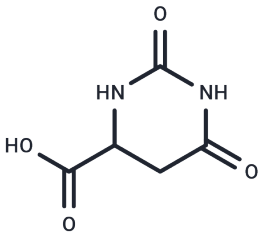
Chemical Properties

CAS No. : 155-54-4

Formula: C5H6N2O4

Molecular Weight: 158.11

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	Hydroorotic acid（Dihydroorotic acid） is an endogenous metabolite involved in the pyrimidine biosynthesis pathway and serves as a potential biomarker for diabetic nephropathy and adrenal pheochromocytoma.
Targets(IC50)	Endogenous Metabolite

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.3247 mL	31.6236 mL	63.2471 mL
5 mM	1.2649 mL	6.3247 mL	12.6494 mL
10 mM	0.6325 mL	3.1624 mL	6.3247 mL
50 mM	0.1265 mL	0.6325 mL	1.2649 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

Tiwari K, et al. Biochemical characterization of dihydroorotase of Leishmania donovani: Understanding pyrimidine metabolism through its inhibition. Biochimie. 2016 Dec;131:45-53.

Duley JA, et al. Elevated plasma dihydroorotate in Miller syndrome: Biochemical, diagnostic and clinical implications, and treatment with uridine. Mol Genet Metab. 2016 Sep;119(1-2):83-90.

Alves CN, et al. Insights into the mechanism of oxidation of dihydroorotate to orotate catalysed by human class 2 dihydroorotate dehydrogenase: a QM/MM free energy study. Phys Chem Chem Phys. 2015 Jul 21;17(27):17790-6. doi: 10.1039/c5cp02016f. Epub 2015 Jun 19. PubMed PMID: 26087682.

Peng WF, et al. Allantoinase and dihydroorotase binding and inhibition by flavonols and the substrates of cyclic amidohydrolases. Biochimie. 2014 Jun;101:113-22. doi: 10.1016/j.biochi.2014.01.001. Epub 2014 Jan 10. PubMed PMID: 24418229.

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