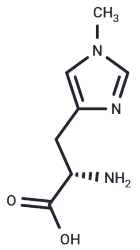
Data Sheet (Cat.No.T4934)

TargetMol

1-Methyl-L-histidine

Chemical Properties



CAS No. : 332-80-9

Formula: C7H11N3O2

Molecular Weight: 169.18

Storage: Store at low temperature,Keep away from moisture
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	1-Methyl-L-histidine (3-(1-Methylimidazol-4-yl)-L-alanine) is a natural but non-proteinogenic amino acid; employed as index of muscle protein breakdown.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	DMSO: Slightly soluble, H2O: 100 mg/mL (591.09 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.9109 mL	29.5543 mL	59.1086 mL
5 mM	1.1822 mL	5.9109 mL	11.8217 mL
10 mM	0.5911 mL	2.9554 mL	5.9109 mL
50 mM	0.1182 mL	0.5911 mL	1.1822 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

Fonteh A N , Harrington R J , Tsai A , et al. Free amino acid and dipeptide changes in the body fluids from Alzheimer's disease subjects[J]. Amino Acids, 2007, 32(2):213-224.
Bahado-Singh R O , Akolekar R , Mandal R , et al. Metabolomics and first-trimester prediction of early-onset preeclampsia[J]. Journal of Maternal-Fetal and Neonatal Medicine, 2012, 25(10):1840-1847.
Gronwald W , Klein M S , Kaspar H , et al. Urinary metabolite quantification employing 2D NMR spectroscopy.[J]. Analytical Chemistry, 2008, 80(23):9288-9297.
Myint T , , Fraser G E , Lindsted K D , et al. Urinary 1-methylhistidine is a marker of meat consumption in Black and in White California Seventh-day Adventists[J]. American Journal of Epidemiology, 2000, 152(8):752-755.
Tuma P , Eva Samcová, Pavla Balínová. Determination of 3-methylhistidine and 1-methylhistidine in untreated urine samples by capillary electrophoresis[J]. Journal of Chromatography B, 2005, 821(1):53-59.