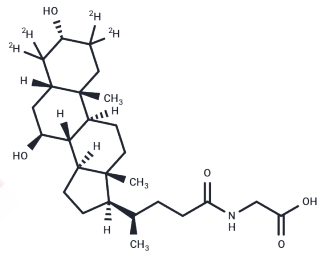
Data Sheet (Cat.No.TMIH-0257)

TargetMol

Glycoursodeoxycholic Acid-D4

Chemical Properties



CAS No. : 2044276-17-5

Formula: C26H43NO5

Molecular Weight: 453.65

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	Glycoursodeoxycholic Acid-D4 is a deuterated compound of Glycoursodeoxycholic Acid. Glycoursodeoxycholic Acid (T5234) has a CAS number of 64480-66-6. Glycoursodeoxycholic acid is an acyl glycine and a bile acid-glycine conjugate. It is a secondary bile acid produced by the action of enzymes existing in the microbial flora of the colonic environment. In hepatocytes, both primary and secondary bile acids undergo amino acid conjugation at the C-24 carboxylic acid on the side chain, and almost all bile acids in the bile duct, therefore, exist in a glycine conjugated form. Bile acids are steroid acids found predominantly in bile of mammals.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: 100 mg/mL (220.43 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2043 mL	11.0217 mL	22.0434 mL
5 mM	0.4409 mL	2.2043 mL	4.4087 mL
10 mM	0.2204 mL	1.1022 mL	2.2043 mL
50 mM	0.0441 mL	0.2204 mL	0.4409 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

Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.
Vaz AR, et al. Bilirubin selectively inhibits cytochrome c oxidase activity and induces apoptosis in immature cortical neurons: assessment of the protective effects of glycoursodeoxycholic acid. J Neurochem. 2010 Jan;112(1):56-65.
Vaz AR, et al. Glycoursodeoxycholic acid reduces matrix metalloproteinase-9 and caspase-9 activation in a cellular model of superoxide dismutase-1 neurodegeneration.
Palmela I, et al. Hydrophilic bile acids protect human blood-brain barrier endothelial cells from disruption by unconjugated bilirubin: an in vitro study. Front Neurosci. 2015 Mar 13;9:80.