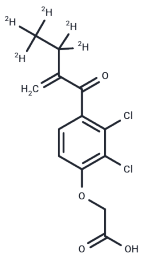
Data Sheet (Cat.No.T11240)

TargetMol

Ethacrynic acid-D5

Chemical Properties



CAS No. : 1330052-59-9

Formula: C13H12Cl2O4

Molecular Weight: 308.17

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	Ethacrynic acid, a diuretic, functions as an inhibitor of L-type voltage-dependent and store-operated calcium channels, facilitating the relaxation of airway smooth muscle (ASM) cells. It exhibits anti-inflammatory effects, notably reducing retinoid-induced ear edema in mice, and inhibits glutathione S-transferases (GSTs), making it a potent suppressor of the NF-kB signaling pathway. Additionally, ethacrynic acid modulates leukotriene formation. A variant, Ethacrynic acid-D5, is distinguished by its deuterium labeling.
Targets(IC50)	Calcium Channel,NF-κB,GST

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.245 mL	16.2248 mL	32.4496 mL
5 mM	0.649 mL	3.245 mL	6.4899 mL
10 mM	0.3245 mL	1.6225 mL	3.245 mL
50 mM	0.0649 mL	0.3245 mL	0.649 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

Li XQ, et al. Metabolism of Strained Rings: Glutathione S-transferase-Catalyzed Formation of a Glutathione-Conjugated Spiro-azetidine without Prior Bioactivation. Drug Metab Dispos. 2019 Nov;47(11):1247-1256.
Harada T, et al. Ethacrynic acid decreases expression of proinflammatory intestinal wall cytokines and ameliorates gastrointestinal stasis in murine postoperative ileus. Clinics (Sao Paulo). 2018 Oct 18;73:e332.
Zhao XX, et al. Ethacrynic acid inhibits airway smooth muscle contraction in mice. Sheng Li Xue Bao. 2019 Dec 25; 71(6):863-873.
Byun HJ, et al. Ethacrynic Acid Inhibits Sphingosylphosphorylcholine-Induced Keratin 8 Phosphorylation and Reorganization via Transglutaminase-2 Inhibition. Biomol Ther (Seoul). 2013 Sep 30;21(5):338-42.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481