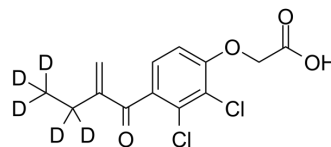


Ethacrynic acid D5

Cat. No.:	HY-108538
CAS No.:	1330052-59-9
Molecular Formula:	C ₁₃ H ₇ D ₅ Cl ₂ O ₄
Molecular Weight:	308.17
Target:	Gutathione S-transferase; NF-κB; Calcium Channel
Pathway:	Metabolic Enzyme/Protease; NF-κB; Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Ethacrynic acid D5 is a deuterium labeled Ethacrynic acid. Ethacrynic acid is a diuretic. Ethacrynic acid is an inhibitor of glutathione S-transferases (GSTs). Ethacrynic acid is a potent inhibitor of NF-κB-signaling pathway, and also modulates leukotriene formation. Ethacrynic acid also inhibits L-type voltage-dependent and store-operated calcium channel, leading to relaxation of airway smooth muscle (ASM) cells. Ethacrynic acid has anti-inflammatory properties that reduces the retinoid-induced ear edema in mice ^{[1][2][3][4]} .
IC₅₀ & Target	Glutathione S-transferases (GSTs) ^[1] ; NF-κB-signaling pathway ^[2] ; L-type voltage-dependent and store-operated calcium channel ^[3]

REFERENCES

- [1]. 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.
- [2]. 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.
- [3]. Zhao XX, et al. Ethacrynic acid inhibits airway smooth muscle contraction in mice. *Sheng Li Xue Bao.* 2019 Dec 25;71(6):863-873.
- [4]. 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.

Caution: Product has not been fully validated for medical applications. For research use only.

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