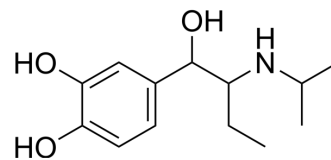


Isoetharine

Cat. No.:	HY-B1481A
CAS No.:	530-08-5
Molecular Formula:	C ₁₃ H ₂₁ NO ₃
Molecular Weight:	239.31
Target:	Adrenergic Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



BIOLOGICAL ACTIVITY

Description	Isoetharine (Isoetarine) is an orally active selective agonist of β -adrenergic receptors. Isoetharine is a catechol-like agent and catechol O-methyltransferase (COMT) mediates its methylation. Isoetharine can promote the production of cAMP which stimulates the relaxation of smooth muscle cells and can be used as an emphysema, bronchitis and bronchodilator ^{[1][2]} .
IC₅₀ & Target	β adrenergic receptor
In Vitro	Isoetharine (50 μ M, 18 hours) can induce the production and release of [³⁵ S]sulfated metabolites of catecholic drugs in HepG2 human hepatoma cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Isoetharine inhibits melanin deposition with the AC ₅₀ value of 5.10 mM and complete inhibition of pigment production at 7.50 mM in the zebrafish larvae model ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Katsuhisa Kurogi et al. Concerted actions of the catechol O-methyltransferase and the cytosolic sulfotransferase SULT1A3 in the metabolism of catecholic drugs. *Biochem Pharmacol.* 2012 Nov 1;84(9):1186-95.

[2]. Monika Maciag et al. Evaluation of β -adrenergic ligands for development of pharmacological heart failure and transparency models in zebrafish. *Toxicol Appl Pharmacol.* 2022 Jan 1;434:115812.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA