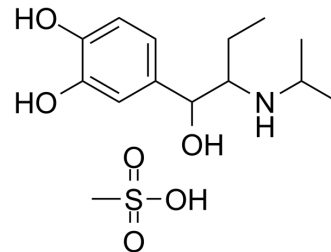


## Isoetharine mesylate

<b>Cat. No.:</b>	HY-B1481
<b>CAS No.:</b>	7279-75-6
<b>Molecular Formula:</b>	C <sub>14</sub> H <sub>25</sub> NO <sub>6</sub> S
<b>Molecular Weight:</b>	335.42
<b>Target:</b>	Adrenergic Receptor
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

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

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