

Tetrindole mesylate

Cat. No.: HY-101169 CAS No.: 170964-68-8 Molecular Formula: $C_{21}H_{30}N_{2}O_{3}S$

Molecular Weight: 390.54

Target: Monoamine Oxidase Pathway: **Neuronal Signaling**

Storage: Please store the product under the recommended conditions in the Certificate of

Product Data Sheet

BIOLOGICAL ACTIVITY

Description	Tetrindole mesylate is a selective inhibitor of monoamine oxidase A (MAO A). Tetrindole mesylate inhibits rat brain mitochondrial MAO A in a competitive manner with a K_i value of 0.4 μ M and inhibits MAO B with a K_i of 110 μ M. Tetrindole mesylate has antidepressant activity ^{[1][2]} .
IC ₅₀ & Target	MAO-A
In Vitro	Tetrindole mesylate has IC $_{50}$ s of 0.51-1.37 μ M for 6 human breast tumor cell lines (MCF-7, HCC1954, T47D, MDA-MB-157, ZR75-1, BT474) ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Tetrindole mesylate (25 mg/kg; po; single dose) inhibits rat brain and liver mitochondrial MAO A by 80% within 0.5-1 hr and the onset of recovery of enzyme activity became evident after 24 hr in male albino rats weighing 180-200 $g^{[1]}$. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. A E Medvedev, et al. Monoamine oxidase inhibition by novel antidepressant tetrindole. Biochem Pharmacol. 1994 Jan 20;47(2):303-8.

[2]. William D Gwynne, et al. Monoamine oxidase-A activity is required for clonal tumorsphere formation by human breast tumor cells. Cell Mol Biol Lett. 2019 Nov 12;24:59.

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

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