

Data Sheet

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Product Name : Primidone

Cat. No. : PC-23871

CAS No. : 125-33-7

Molecular Formula : C₁₂H₁₄N₂O₂

Molecular Weight : 218.26

Target : TRP Channel

Solubility : 10 mM in DMSO



Biological Activity

Primidone is an anticonvulsant agent and highly efficient, selective TRPM3 blocker IC50 of 0.6 uM and marked specificity for TRPM3

Primidone (3-5 uM) inhibits PregS-induced inward currents in electrophysiological recordings, Primidone (10 uM) also inhibits the omega pore-like currents evoked by coapplied PregS and clotrimazole.

Primidone shows no effect on TRPA1, TRPM8, TRPM2, TRPC5, TRPC6 and P2X7 receptors.

Primidone acts as an inhibitory allosteric modulator and suppresses TRPM3-dependent Ca2+ entry induced by thermal stimulation.

Primidone blocks calcium signals in isolated rat dorsal root ganglia neurones and human TRPM3.

Primidone attenuates the sensitivity of mice to chemical and thermal stimulation.

References

Yin Y, et al. Nat Struct Mol Biol. 2025 Jan 14.

Krügel U, et al. Pain. 2017 May;158(5):856-867.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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