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Produktinformation

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- Laborgeräte & Service

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siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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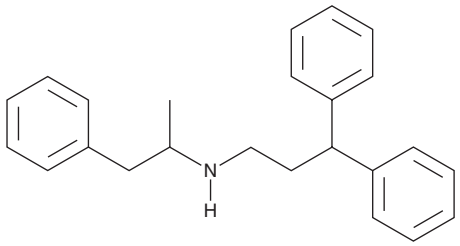
PRODUCT INFORMATION

Prenylamine

Item No. 29430

CAS Registry No.:	390-64-7
Formal Name:	N-(1-methyl-2-phenylethyl)-γ-phenyl-benzenepropanamine
MF:	$C_{24}H_{27}N$
FW:	329.5
Purity:	≥98%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Prenylamine is supplied as a solid. A stock solution may be made by dissolving the prenylamine in the solvent of choice, which should be purged with an inert gas. Prenylamine is slightly soluble in methanol and chloroform.

Description

Prenylamine is a calcium channel inhibitor.[1] It inhibits the plasma membrane Ca^{2+} ATPase (PMCA) in isolated and purified pig cardiac sarcolemma.[2] It binds to a hydrophobic site on calcium-bound calmodulin (CaM) with a K_d value of 0.5 µM and inhibits CaM-activated cAMP phosphodiesterase (PDE) activity when used at concentrations ranging from 10 to 50 µM, an effect that is negatively associated with the concentration of calmodulin.[2,3] Prenylamine (30 µM) shortens action potential duration and decreases the amplitude of peak calcium currents in single guinea pig ventricular myocytes in the absence and presence of propranolol (Item No. 23349) and phentolamine (Item No. 16135).[4] Prenylamine (50 mg/kg) decreases epinephrine, serotonin, and dopamine levels in rat brain.[5] It also decreases epinephrine levels in rat heart. It protects anesthetized rats from coronary artery occlusion-induced arrhythmia when administered at a dose of 0.5 mg/kg but increases mortality due to atrioventricular block leading to asystole when administered at a dose of 5 mg/kg.[6]

References

1. Bayer, R., Schwarzmaier, J., and Pernice, R. Basic mechanisms underlying prenylamine-induced 'torsade de pointes': Differences between prenylamine and fendiline due to basic actions of the isomers. *Curr. Med. Res. Opin.* **11(4)**, 254-272 (1988).
2. Lamers, J.M., Cysouw, K.J., and Verdouw, P.D. Slow calcium channel blockers and calmodulin. Effect of felodipine, nifedipine, prenylamine and bepridil on cardiac sarcolemmal calcium pumping ATPase. *Biochem. Pharmacol.* **34(21)**, 3837-3843 (1985).
3. Johnson, J.D. and Wittenauer, L.A. A fluorescent calmodulin that reports the binding of hydrophobic inhibitory ligands. *Biochem. J.* **211(2)**, 473-479 (1983).
4. Shimoni, Y., Posner, P., Spindler, A.J., *et al.* The effects of prenylamine on single ventricular myocytes of guinea-pig. *Br. J. Pharmacol.* **94(2)**, 319-324 (1988).
5. Obianwu, H.O. The effect of prenylamine (segontin®) on the amine levels of brain, heart and adrenal medulla in rats. *Acta. Pharmacol. Toxicol. (Copenh.)* **23(4)**, 383-390 (1965).
6. Fagbemi, O., Kane, K.A., McDonald, F.M., *et al.* The effects of verapamil, prenylamine, flunarizine and cinnarizine on coronary artery occlusion-induced arrhythmias in anaesthetized rats. *Br. J. Pharmacol.* **83(1)**, 299-304 (1984).

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