

Product Data Sheet

Product Name: Carvedilol phosphate hemihydrate

Cat. No.: GC35613

Chemical Properties

Cas. No. 610309-89-2

SMILES O=P(O)(O)OC(CNCCOC1=CC=CC=C1OC)COC2=CC=CC(N3)=C2C4=C3C=CC=C4
.[HH].[0.5H2O]

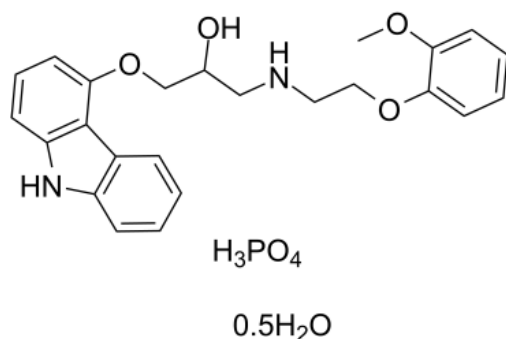
Formula $C_{24}H_{26}N_2O_4 \cdot H_3PO_4 \cdot \frac{1}{2}H_2O$ M.Wt 513.48

Solubility DMSO : 100mg/mL Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Background

Carvedilol (phosphate hemihydrate) (BM 14190 (phosphate hemihydrate)) is a non-selective beta blocker/alpha-1 blocker with an IC₅₀ of 3.8 μM for inhibition of LDL oxidation. IC₅₀: 3.8 μM (beta Adrenergic Receptor).

Carvedilol (BM 14190) is a nonselective-blocking agent and is used in the treatment of hypertension and angina pectoris. As a third-generation β-adrenergic blocker (β-blocker), Carvedilol is able to

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reverse cardiac structural remodeling. Recent results demonstrated that the effect caused by Carvedilol on cardiac remodeling is largely dependent on endogenous NO.

[1]. Chen J, et al. The effects of carvedilol on cardiac structural remodeling: The role of endogenous nitric oxide in the activity of carvedilol. *Mol Med Rep.* 2013 Apr;7(4):1155-1158. [2]. Stafylas PC, et al. Carvedilol in hypertension treatment. *Vasc Health Risk Manag.* 2008;4(1):23-30. [3]. Othman AA, et al. Population pharmacokinetics of S(-)-carvedilol in healthy volunteers after administration of the immediate-release (IR) and the new controlled-release (CR) dosage forms of the racemate. *AAPS J.* 2007 Jun 15;9(2):E208-18. [4]. Koshimizu TA, et al. Carvedilol selectively inhibits oscillatory intracellular calcium changes evoked by human alpha1D- and alpha1B-adrenergic receptors. *Cardiovasc Res.* 2004 Sep 1;63(4):662-672.

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