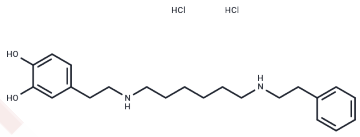
Data Sheet (Cat.No.T11318)

TargetMol

Dopexamine hydrochloride

Chemical Properties



CAS No. :	86484-91-5
Formula:	C22H34Cl2N2O2
Molecular Weight:	429.42
Storage:	Powder: -20°C for 3 years | In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.

Biological Description

Description	Dopexamine hydrochloride (FPL60278AR) is a β2-adrenergic receptor agonist. Dopexamine can attenuate the inflammatory response and protect against organ injury in the absence of significant effects on hemodynamics or regional microvascular flow.
Targets(IC50)	Adrenergic Receptor
In vitro	Dopexamine, a dopamine analogue, stimulates β-adrenergic as well as dopamine 1 and 2 receptors, offering vasodilatory effects. It effectively mitigates the systemic inflammatory response triggered by endotoxin, including the release of cytokines, the expression of endothelial adhesion molecules, and oxidative stress, without significantly affecting systemic hemodynamics, such as blood pressure or stroke volume. Additionally, dopexamine possesses agonist activity at β2 and dopaminergic receptors, and at dosages that do not impact global hemodynamics or regional microvascular flow, it can diminish tissue leukocyte infiltration and confer protection against organ damage.

Solubility Information

Solubility	DMSO: 150 mg/mL (349.31 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (2.33 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3287 mL	11.6436 mL	23.2872 mL
5 mM	0.4657 mL	2.3287 mL	4.6574 mL
10 mM	0.2329 mL	1.1644 mL	2.3287 mL
50 mM	0.0466 mL	0.2329 mL	0.4657 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Bangash MN, et al. Dopexamine can attenuate the inflammatory response and protect against organ injury in the absence of significant effects on hemodynamics or regional microvascular flow. Crit Care. 2013 Mar 28;17(2):R57.
Hollenberg SM. Dopexamine: immunomodulatory, hemodynamic, or both? Crit Care. 2013 May 13;17(3):143.