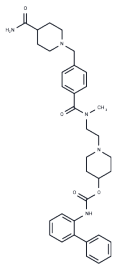
Data Sheet (Cat.No.T7392)

TargetMol

Revefenacin

Chemical Properties



CAS No. : 864750-70-9

Formula: C35H43N5O4

Molecular Weight: 597.75

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	Revefenacin (TD-4208) is a mAChR antagonist has a high affinity on M3 receptor(Ki : 0.18 nM),and potentially useful for the treatment of respiratory disease.
Targets(IC50)	AChR
In vivo	In anesthetized dogs, Revefenacin, along with tiotropium and glycopyrronium, produced sustained inhibition of acetylcholine-induced bronchoconstriction for up to 24 hours. In anesthetized rats, inhaled Revefenacin exhibited dose-dependent 24-hour bronchoprotection against methacholine-induced bronchoconstriction. The estimated 24-hour potency (expressed as concentration of dosing solution) was 45.0 μg/ml[1].

Solubility Information

Solubility	DMSO: 49 mg/mL (81.97 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: 4 mg/mL (6.69 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	1.6729 mL	8.3647 mL	16.7294 mL
5 mM	0.3346 mL	1.6729 mL	3.3459 mL
10 mM	0.1673 mL	0.8365 mL	1.6729 mL
50 mM	0.0335 mL	0.1673 mL	0.3346 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

Pulido-Rios MT, McNamara A, Obedencio GP,et al.In vivo pharmacological characterization of TD-4208, a novel lung-selective inhaled muscarinic antagonist with sustained bronchoprotective effect in experimental animal models[J].J Pharmacol Exp Ther. 2013 Aug;346(2):241-50.

Pudi KK, Barnes CN, Moran EJ,et al.A 28-day, randomized, double-blind, placebo-controlled, parallel group study of nebulized revefenacin in patients with chronic obstructive pulmonary disease[J].Respir Res. 2017 Nov 2;18(1):182.