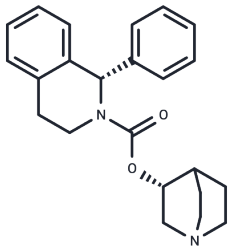
Data Sheet (Cat.No.T8147)

TargetMol

Solifenacin

Chemical Properties



CAS No. : 242478-37-1

Formula: C23H26N2O2

Molecular Weight: 362.46

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	Solifenacin (YM905 free base) (YM905 free base) is a novel muscarinic receptor antagonist, its pKis for M1, M2 and M3 receptors is of 7.6, 6.9 and 8.0, respectively.
Targets(IC50)	AChR
In vivo	Solifenacin exerts minimal inhibitory effects on salivary and cardiac responses at a dosage of 630 nmol/kg (0.3 mg/kg), achieving inhibition levels of 66% and 49%, respectively, at 2100 nmol/kg (1 mg/kg). At lower doses (63 and 210 nmol/kg or 0.03 and 0.1 mg/kg), Solifenacin slightly enhances saliva secretion. Conversely, it reduces bladder responses by 40% at 210 nmol/kg (0.1 mg/kg) and completely suppresses them at 2100 nmol/kg (1 mg/kg). Intravenously administered, Solifenacin (0.01 to 0.3 mg/kg) progressively augments bladder capacity and the volume of urine voided when dosed at 0.03 mg/kg or higher, without impacting residual volume or micturition pressure at any administered dosage.

Solubility Information

Solubility	DMSO: 72.14 mg/mL (199.03 mM),Sonication is recommended. H2O: < 0.1 mg/mL (insoluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 7.21 mg/mL (19.89 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 7.21 mg/mL (19.89 mM),Solution. *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	2.7589 mL	13.7946 mL	27.5893 mL
5 mM	0.5518 mL	2.7589 mL	5.5179 mL
10 mM	0.2759 mL	1.3795 mL	2.7589 mL
50 mM	0.0552 mL	0.2759 mL	0.5518 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.

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