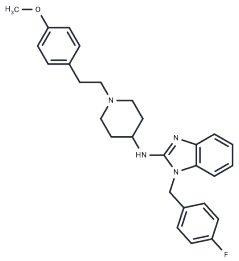
Data Sheet (Cat.No.T1278)

TargetMol

Astemizole

Chemical Properties



CAS No. : 68844-77-9

Formula: C28H31FN4O

Molecular Weight: 458.57

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	Astemizole (Laridal) is a synthetic piperidinyl-benzimidazol derivative with antiallergic properties, acts as a reversible competitive inhibitor of histamine H1 receptors, with less anticholinergic effects compared to related agents. It is a long-acting, non-sedative antihistaminic used in the treatment of seasonal allergic rhinitis, asthma, allergic conjunctivitis, and chronic idiopathic urticaria.
Targets(IC50)	Histamine Receptor,Potassium Channel

Solubility Information

Solubility	DMSO: 150 mg/mL (327.1 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (21.81 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (21.81 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	2.1807 mL	10.9035 mL	21.8069 mL
5 mM	0.4361 mL	2.1807 mL	4.3614 mL
10 mM	0.2181 mL	1.0903 mL	2.1807 mL
50 mM	0.0436 mL	0.2181 mL	0.4361 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

Salata JJ, et al. Circ Res. 1995 Jan;76(1):110-9.
Wang D, Guo Q, Wu Z, et al.Molecular mechanism of antihistamines recognition and regulation of the histamine H1 receptor.Nature Communications.2024, 15(1): 84.
Sun X, Wang Y, Yuan F, et al.Gut symbiont-derived sphingosine modulates vector competence in Aedes mosquitoes.Nature Communications.2024, 15(1): 8221.
Molecular mechanism of antihistamines recognition and regulation of the histamine H1 receptor