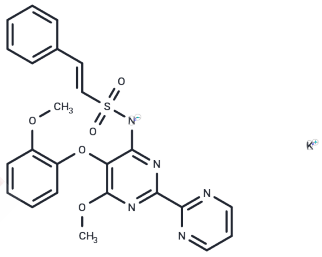
Data Sheet (Cat.No.T36008)

TargetMol

Nebentan potassium

Chemical Properties



CAS No. : 342005-82-7

Formula: C24H20KN5O5S

Molecular Weight: 529.61

Storage: Keep away from moisture
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	Nebentan potassium (YM598) is an orally active and selective nonpeptide endothelin receptor (ETA receptor) antagonist.Nebentan potassium inhibits pulmonary arterial hypertension and may be useful in the study of neurologic and cardiovascular diseases.
Targets(IC50)	Endothelin Receptor
In vitro	Nebentan potassium also inhibited endothelin-1-induced vasoconstriction in isolated rat aorta with a pA(2) value of 7.6[1].
In vivo	In medullary rats, the DR(2) values of Nebentan potassium are 0.53 mg/kg and 0.77 mg/kg, respectively. When administered orally at 1 mg/kg, Nebentan potassium maintains its antagonistic effects in conscious rats for over 6.5 hours[1].

Solubility Information

Solubility	DMSO: 100 mg/mL (188.82 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: 3.3 mg/mL (6.23 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	1.8882 mL	9.4409 mL	18.8818 mL
5 mM	0.3776 mL	1.8882 mL	3.7764 mL
10 mM	0.1888 mL	0.9441 mL	1.8882 mL
50 mM	0.0378 mL	0.1888 mL	0.3776 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

Hironori Yuyama, et al. Pharmacological Characterization of YM598, an Orally Active and Highly Potent Selective Endothelin ET(A) Receptor Antagonist. Eur J Pharmacol. 2003 Sep 30;478(1):61-71.
Akira Fujimori, et al. YM598, an Orally Active ET(A) Receptor Antagonist, Ameliorates the Progression of Cardiopulmonary Changes and Both-Side Heart Failure in Rats With Cor Pulmonale and Myocardial Infarction. J Cardiovasc Pharmacol. 2004 Nov;44 Suppl 1: