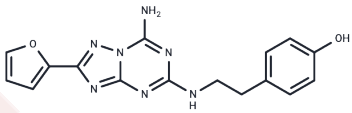
Data Sheet (Cat.No.T7021)

TargetMol

ZM241385

Chemical Properties



CAS No. : 139180-30-6

Formula: C16H15N7O2

Molecular Weight: 337.34

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	ZM-241385 is a high-affinity antagonist ligand selective for the adenosine A2A receptor.
Targets(IC50)	Adenosine Receptor
In vitro	ZM 241385 has high affinity for A2a receptors. In rat phaeochromocytoma cell membranes, ZM 241385 displaces binding of tritiated 5'-N-ethylcarboxamidoadenosine (NECA) with a pIC50 of 9.52[3]. ZM241385 delays the appearance of anoxic depolarization (AD), a phenomenon strictly related to cell damage and death, protect from the synaptic activity depression brought about by a severe (7?min) OGD period, and protect CA1 neuron and astrocyte from injury[4].
In vivo	ZM-241385 significantly blunts the hypotensive effects of CCPA and NECA without altering the bradycardia induced by these agonists. It blocks the infarct size-reducing effects(cardioprotective effects) of this two distinct adenosine receptor agonists[1].
Cell Research	Nitric oxide (NO) production is assessed by measuring the amount of nitrite, a stable metabolic product of NO that provides an indirect measurement of NO, by using the Griess diazotization reaction. Briefly, 24 h after incubation with 1.0 μM CG21680 or 1.0 μM ZM241385 or exposure to SMF, samples of medium (150 μl) are collected from cells and mixed with 130 μl dWater and with 20 μl Griess reagent using instruction supplied by the manufacturer. After a 30 min incubation period at room temperature, the samples are evaluated spectrophotometrically at 548 nm and OD values-in comparison with a standard curve is determined in culture medium by using serial dilutions of sodium nitrite-represented total stable metabolites of NO. (Only for Reference)

Solubility Information

Solubility	Ethanol: 1.7 mg/mL (5.04 mM),Sonication is recommended. DMSO: 120 mg/mL (355.72 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: 10 mg/mL (29.64 mM),Solution. 10% DMSO+90% Saline: < 10 mg/mL (29.64 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *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*

In vivo Formulation	*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	2.9644 mL	14.8218 mL	29.6437 mL
5 mM	0.5929 mL	2.9644 mL	5.9287 mL
10 mM	0.2964 mL	1.4822 mL	2.9644 mL
50 mM	0.0593 mL	0.2964 mL	0.5929 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

Lasley RD, et al. Am J Physiol Heart Circ Physiol. 2007, 292(1):H426-31.
Luo Y, Xue Y, Lin Q, et al. CD39 pathway inhibits Th1 cell function in tuberculosis. Immunology. 2022
Wang Z, et al. PLoS One. 2010, 5(11):e13883.
S. M. Poucher, et al. Br J Pharmacol. 1995 Jul; 115(6): 1096–1102.
Pedata F, et al. Mediators Inflamm. 2014: 805198.