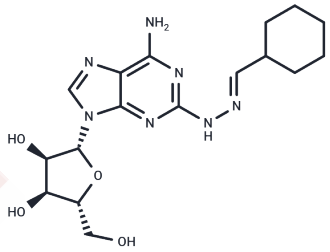
Data Sheet (Cat.No.T9516)

TargetMol

Binodenoson

Chemical Properties



CAS No. : 144348-08-3

Formula: C17H25N7O4

Molecular Weight: 391.42

Storage: Keep away from direct sunlight,Store at low temperature
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	Binodenoson (WRC 0470) is a potent and selective A2A adenosine receptor agonist (KD=270 nM). Binodenoson is being developed as a short-acting coronary vasodilator as an adjunct to radiotracers for use in myocardial stress imaging[1].
Targets(IC50)	Adenosine Receptor
In vitro	2-(cyclohexylmethylidenehydrazino)adenos (30-300 nM) decreases oxidative activity of tumor necrosis factor-α-primed FMLP-stimulated polymorphonuclear leukocytes in human whole blood and acts synergistically with Rolipram[1].
In vivo	Binodenoson (infused 0-0.9 μg/kg/h; adult Wistar rat; rat bacterial meningitis model), with or without rolipram (0-0.01 μg/kg/h), inhibits pleocytosis and reduces the lipopolysaccharide-induced increase in blood-brain barrier permeability (BBBP), indicative of decreased neutrophil-induced damage[1].

Solubility Information

Solubility	DMSO: 11 mg/mL (28.1 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: 2 mg/mL (5.11 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	2.5548 mL	12.774 mL	25.548 mL
5 mM	0.511 mL	2.5548 mL	5.1096 mL
10 mM	0.2555 mL	1.2774 mL	2.5548 mL
50 mM	0.0511 mL	0.2555 mL	0.511 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

Sullivan GW, et al. Neutrophil A2A adenosine receptor inhibits inflammation in a rat model of meningitis: synergy with the type IV phosphodiesterase inhibitor, rolipram. J Infect Dis. 1999;180(5):1550-1560.
Glover DK, et al. Pharmacological stress thallium scintigraphy with 2-cyclohexylmethylidenehydrazinoadenosine (WRC-0470). A novel, short-acting adenosine A2A receptor agonist. Circulation. 1996;94(7):1726-1732.