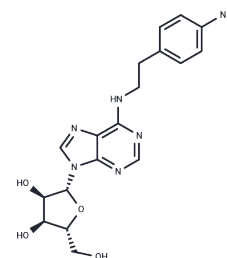


## APNEA

## Chemical Properties

CAS No. :	89705-21-5
Formula:	C <sub>18</sub> H <sub>22</sub> N <sub>6</sub> O <sub>4</sub>
Molecular Weight:	386.41
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	APNEA ((2R,3R,4S,5R)-2-[6-[2-(4-aminophenyl)ethylamino]purin-9-yl]-5-(hydroxymethyl)oxolane-3,4-diol) is a non-selective agonist of adenosine A3 receptor.
Targets(IC50)	Adenosine Receptor
In vitro	APNEA at the subprotective dose of 1 mg/kg against electroconvulsions, significantly potentiated the anticonvulsive action of phenobarbital, diphenylhydantoin and valproate against maximal electroshock, being ineffective at lower doses[2].
In vivo	APNEA (0.0039-1 mg/kg) enhanced the protective activity of carbamazepine. APNEA (0.0156 and 1 mg/kg) administered alone or in combination with carbamazepine significantly decreased the body temperature and impaired long-term memory[2].

## Solubility Information

Solubility	DMSO: 200 mg/mL (517.58 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: 5 mg/mL (12.94 mM),Sonication is recommended. <i>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.</i>

### Preparing Stock Solutions

---

	1mg	5mg	10mg
1 mM	2.5879 mL	12.9396 mL	25.8792 mL
5 mM	0.5176 mL	2.5879 mL	5.1758 mL
10 mM	0.2588 mL	1.294 mL	2.5879 mL
50 mM	0.0518 mL	0.2588 mL	0.5176 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

Borowicz KK, et al. N6-2-(4-aminophenyl)ethyl-adenosine enhances the anticonvulsive activity of antiepileptic drugs. *Eur J Pharmacol.* 1997 May 30;327(2-3):125-133.

Borowicz KK, et al. N(6)-2-(4-aminophenyl)ethyl-adenosine enhances the anticonvulsive action of conventional antiepileptic drugs in the kindling model of epilepsy in rats. *Eur Neuropsychopharmacol.* 2000 Jul;10(4):237-243.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481