# N6-(2-Phenylethyl)adenosine

**Cat. No.:** HY-101854

**CAS No.:** 20125-39-7

**Molecular Formula:** $C_{18}H_{21}N_5O_4$

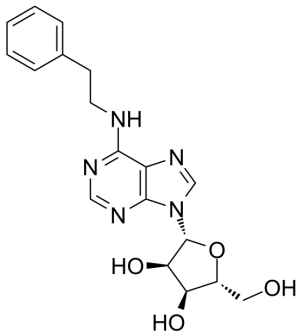
**Molecular Weight:** 371.39

**Target:** Adenosine Receptor

**Pathway:** GPCR/G Protein

**Storage:**

| | | |
|---|---|---|
| Powder | -20°C | 3 years |
| | 4°C | 2 years |
| In solvent | -80°C | 2 years |
| | -20°C | 1 year |



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 100 mg/mL (269.26 mM; Need ultrasonic)

$H_2O$ : < 0.1 mg/mL (insoluble)

**Preparing Stock Solutions**

| Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 2.6926 mL | 13.4629 mL | 26.9259 mL |
| 5 mM | 0.5385 mL | 2.6926 mL | 5.3852 mL |
| 10 mM | 0.2693 mL | 1.3463 mL | 2.6926 mL |

Please refer to the solubility information to select the appropriate solvent.

**In Vivo**

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (6.73 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.73 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.73 mM); Clear solution

## BIOLOGICAL ACTIVITY

**Description**

N6-(2-Phenylethyl)adenosine (N6-Phenethyladenosine), an adenosine derivative, is a potent adenosine receptors (AR) agonist with $K_i$ values of 11.8 nM, 30.1 nM, 0.63 nM for rat $A_1$AR, human $A_1$AR and $hA_3$AR, respectively[1].

**$IC_{50}$ & Target**

Ki: 11.8 nM ($rA_1$AR), 30.1 nM ($hA_1$AR) and 0.63 nM ($hA_3$AR)[1]

**In Vitro**

N6-(2-Phenylethyl)adenosine (N6-Phenethyladenosine) inhibits $rA_2$AR ($IC_{50}$=560 nM), $hA_2$AR ($IC_{50}$=2250 nM) in CHO cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES

[1]. Tchilibon S, et al. Exploring distal regions of the A3 adenosine receptor binding site: sterically constrained N6-(2-phenylethyl)adenosine derivatives as potent ligands. Bioorg Med Chem. 2004 May 1;12(9):2021-34.



Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA