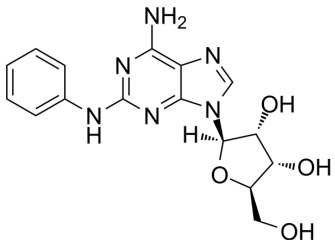
CV1808

Cat. No.:	HY-103183
CAS No.:	53296-10-9
Molecular Formula:	$C_{16}H_{18}N_6O_4$
Molecular Weight:	358.35
Target:	Endogenous Metabolite; Adenosine Receptor
Pathway:	Metabolic Enzyme/Protease; GPCR/G Protein
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



BIOLOGICAL ACTIVITY

Description	CV1808 (2-Phenylaminoadenosine) is a non-selective A2 adenosine receptor (A2 AR) agonist with K_is of 76 and 1450 nM for A2A and A3 adenosine receptor subtypes, respectively[1].
In Vitro	CV1808 demonstrates an inhibitory effect on anti-IgE-induced activation at 100 μM[1]. In the presence of Forskolin (1 μM in PC12 cells; 10 μM in Jurkat cells) the EC_{50} value for CV1808 is 2 μM[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Single afferent arterioles of Sprague-Dawley rats are visualized and superfused with solutions containing CV1808 (CV-1808). Superfusion with CV1808 (0.002-2 μM) dilates afferent arterioles[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Sprague-Dawley rat, weighing 370-410 g[3]
Dosage:	0.002, 0.02, 0.2, and 2 μM
Administration:	Single afferent arterioles of Sprague-Dawley rats were visualized and superfused with solutions containing CV-1808
Result:	Afferent arteriolar diameter increased from 17.0±0.3 to 17.2±0.4, 17.8±0.4, 18.5±0.5, and 19.9±0.7 μM, 17.2±2.4% at concentrations of 0.002, 0.02, 0.2, and 2 μM.

REFERENCES

[1]. K H Yip, et al. Reciprocal modulation of anti-IgE induced histamine release from human mast cells by A_1 and A(2B) adenosine receptors. Br J Pharmacol. 2011 Sep;164(2b):807-19.

[2]. I van der Ploeg,et al.Functional characterization of adenosine A2 receptors in Jurkat cells and PC12 cells using adenosine receptor agonists. Naunyn Schmiedebergs Arch Pharmacol.1996 Feb;353(3):250-60.

[3]. Ming-Guo Feng, et al. Afferent arteriolar vasodilator effect of adenosine predominantly involves adenosine A2B receptor activation. Am J Physiol Renal Physiol. 2010 Aug;299(2):F310-5.

Caution: Product has not been fully validated for medical applications. For research use only.

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