

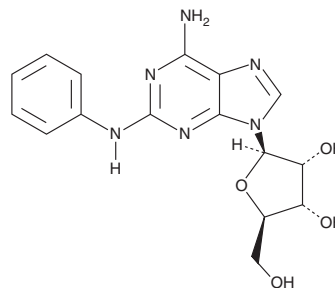
PRODUCT INFORMATION



2-Phenylaminoadenosine

Item No. 28734

CAS Registry No.: 53296-10-9
Synonym: CV-1808
MF: $C_{16}H_{18}N_6O_4$
FW: 358.4
Purity: $\geq 98\%$
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

2-Phenylaminoadenosine is supplied as a solid. A stock solution may be made by dissolving the 2-phenylaminoadenosine in the solvent of choice, which should be purged with an inert gas. 2-Phenylaminoadenosine is slightly soluble in methanol (sonicated) and DMSO.

Description

2-Phenylaminoadenosine is an adenosine receptor agonist.¹ It binds to adenosine A_1 receptors in rat cortical membranes ($IC_{50} = 910$ nM) and A_2 receptors in rat striatal membranes ($IC_{50} = 115$ nM). 2-Phenylaminoadenosine increases coronary flow in a perfused working rat heart model *ex vivo* ($EC_{25} = 110$ nM). It decreases blood pressure in normotensive ($ED_{25} = 28$ $\mu g/kg$) and spontaneously hypertensive rats (SHR; $ED_{30} = 5.32$ $\mu g/kg$).^{1,2} 2-Phenylaminoadenosine (500 nmol/kg) increases L-dihydroxyphenylalanine (L-DOPA; Item No. 13248) accumulation in rat striatum.³ It also inhibits conditioned avoidance responding (CAR) to electric shock in rats ($ED_{50} = 1.3$ mg/kg).⁴

References

1. Hutchison, A.J., Webb, R.L., Oei, H.H., *et al.* CGS 21680C, an A_2 selective adenosine receptor agonist with preferential hypotensive activity. *J. Pharmacol. Exp. Ther.* **251**(1), 47-55 (1989).
2. Abiru, T., Yamaguchi, T., Watanabe, Y., *et al.* The antihypertensive effect of 2-alkynyladenosines and their selective affinity for adenosine A_2 receptors. *Eur. J. Pharmacol.* **196**(1), 69-76 (1991).
3. Choksi, N.Y., Hussain, A., and Booth, R.G. 2-Phenylaminoadenosine stimulates dopamine synthesis in rat forebrain in vitro and in vivo via adenosine A_2 receptors. *Brain Res.* **761**(1), 151-155 (1997).
4. Martin, G.E., Rossi, D.J., and Jarvis, M.F. Adenosine agonists reduce conditioned avoidance responding in the rat. *Pharmacol. Biochem. Behav.* **45**(4), 951-958 (1993).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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