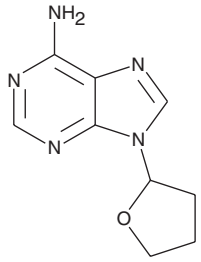
PRODUCT INFORMATION

SQ 22,536

Item No. 13339

CAS Registry No.: 17318-31-9
Formal Name: 9-(tetrahydro-2-furanyl)-9H-purin-6-amine
Synonym: NSC 53339
MF: $C_9H_{11}N_5O$
FW: 205.2
Purity: ≥95%
UV/Vis.: λ_{max}: 209, 260 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

SQ 22,536 is supplied as a crystalline solid. A stock solution may be made by dissolving the SQ 22,536 in the solvent of choice, which should be purged with an inert gas. SQ 22,536 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SQ 22,536 in ethanol is approximately 3 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of SQ 22,536 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of SQ 22,536 in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

SQ 22,536 is an inhibitor of adenylyl cyclase with an IC_{50} value of 13 µM for inhibition of prostaglandin E_1-stimulated increase in cAMP in intact platelets.[1] It has been used to evaluate adenylyl cyclase activity during iloprost-induced vasorelaxation of isolated pulmonary veins or aorta in several research paradigms, inhibiting cAMP elevation at concentrations of 100-300 µM without effecting relaxation.[2,3]

References

1. Haslam, R.J., Davidson, M.M.L., and Desjardins, J.V. Inhibition of adenylate cyclase by adenosine analogues in preparations of broken and intact human platelets. *Biochem. J.* **176(1)**, 83-95 (1978).
2. Turcato, S. and Clapp, L.H. Effects of the adenylyl cyclase inhibitor SQ22536 on iloprost-induced vasorelaxation and cyclic AMP elevation in isolated guinea-pig aorta. *Br. J. Pharmacol.* **126(4)**, 845-847 (1999).
3. Gao, Y. and Raj, J.U. Effects of SQ 22536, an adenylyl cyclase inhibitor, on isoproterenol-induced cyclic AMP elevation and relaxation in newborn ovine pulmonary veins. *Eur. J. Pharmacol.* **436(3)**, 227-233 (2002).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM