

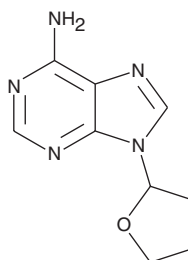
# PRODUCT INFORMATION



**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<sub>9</sub>H<sub>11</sub>N<sub>5</sub>O  
**FW:** 205.2  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 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<sub>50</sub> value of 13 μM for inhibition of prostaglandin E<sub>1</sub>-stimulated increase in cAMP in intact platelets.<sup>1</sup> 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.<sup>2,3</sup>

## References

1. Haslam, R.J., Davidson, M.M.L., and Desjardins, J.V. Inhibition of adenylyl 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).

### 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.

### WARRANTY AND LIMITATION OF REMEDY

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