

PRODUCT INFORMATION



BAY 60-6583

Item No. 17127

CAS Registry No.: 910487-58-0

Formal Name: 2-[[6-amino-3,5-dicyano-4-[4-(cyclopropylmethoxy)phenyl]-2-pyridinyl]thio]-acetamide

MF: C₁₉H₁₇N₅O₂S

FW: 379.4

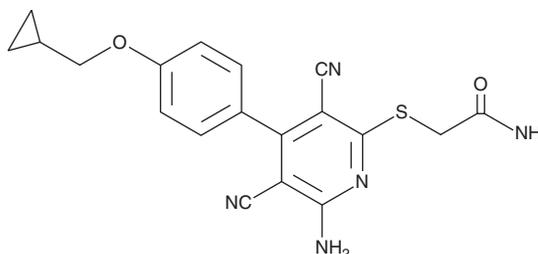
Purity: ≥98%

UV/Vis.: λ_{max}: 253, 288, 344 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

BAY 60-6583 is supplied as a crystalline solid. A stock solution may be made by dissolving the BAY 60-6583 in the solvent of choice, which should be purged with an inert gas. BAY 60-6583 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of BAY 60-6583 in these solvents is approximately 0.3, 30, and 25 mg/ml, respectively.

BAY 60-6583 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BAY 60-6583 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. BAY 60-6583 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

BAY 60-6583 is an adenosine A_{2B} receptor agonist (EC₅₀ = 3 nM for human A_{2B} receptors) that displays selectivity over A₁, A_{2A}, and A₃ receptors (EC₅₀s = >10 μM).¹ It has been used to decrease superoxide production in neutrophils and to study the role of the A_{2B} receptor in regulating inflammation and mediating metabolic homeostasis in a mouse model of type 2 diabetes and obesity.^{2,3} BAY 60-6583 has also been examined for potential clinical use in disorders of the coronary arteries and atherosclerosis and in ischemia-reperfusion injury.¹

References

1. Van der Hoeven, D., Wan, T. C., Gizewski, E. T., *et al.* A role for the low-affinity A_{2B} adenosine receptor in regulating superoxide generation by murine neutrophils. *J. Pharmacol. Exp. Ther.* **338**(3), 1004-1012 (2011).
2. Johnston-Cox, H., Koupenova, M., Yang, D., *et al.* The A_{2b} adenosine receptor modulates glucose homeostasis and obesity. *PLoS One* **7**(7), 1-9 (2012).
3. Baraldi, P. G., Tabrizi, M. A., Fruttarolo, F., *et al.* Recent improvements in the development of A_{2B} adenosine receptor agonists. *Purinergic Signal.* **5**(1), 3-19 (2009).

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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