

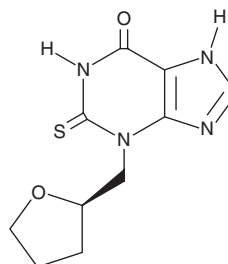
PRODUCT INFORMATION



AZD 5904

Item No. 33931

CAS Registry No.: 618913-30-7
Formal Name: 1,2,3,9-tetrahydro-3-[[[(2R)-tetrahydro-2-furanyl]methyl]-2-thioxo-6H-purin-6-one
MF: C₁₀H₁₂N₄O₂S
FW: 252.3
Purity: ≥98%
UV/Vis.: λ_{max}: 234, 291 nm
Supplied as: A 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

AZD 5904 is supplied as a solid. A stock solution may be made by dissolving the AZD 5904 in the solvent of choice, which should be purged with an inert gas. AZD 5904 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of AZD 5904 in these solvents is approximately 5 and 10 mg/ml, respectively.

Description

AZD 5904 is an irreversible inhibitor of myeloperoxidase (MPO; IC₅₀ = 0.2 μM in a cell-free assay).¹ It enhances decreases in the mitochondrial membrane potential in, and the viability of, MOLM-14 acute myeloid leukemia (AML) cells when used in combination with cytarabine (Item No. 16069).² AZD 5904 (75 μmol/kg) prevents high-fat diet-induced increases in microvascular blood flow and microvascular blood volume in rats.³

References

1. Tidén, A.-K., Sjögren, T., Svensson, M., *et al.* 2-Thioxanthines are mechanism-based inactivators of myeloperoxidase that block oxidative stress during inflammation. *J. Biol. Chem.* **286**(43), 37578-37589 (2011).
2. Hosseini, M., Rezvani, H.R., Aroua, N., *et al.* Targeting myeloperoxidase disrupts mitochondrial redox balance and overcomes cytarabine resistance in human acute myeloid leukemia. *Cancer Res.* **79**(20), 5191-5203 (2019).
3. Chai, W., Aylor, K., Liu, Z., *et al.* Inhibiting myeloperoxidase prevents onset and reverses established high-fat diet-induced microvascular insulin resistance. *Am. J. Physiol. Endocrinol. Metab.* **317**(6), E1063-E1069 (2019).

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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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