

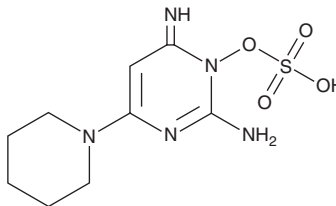
PRODUCT INFORMATION



Minoxidil Sulfate

Item No. 36084

CAS Registry No.: 83701-22-8
Formal Name: 1,6-dihydro-6-imino-4-(1-piperidinyl)-1-(sulfooxy)-2-pyrimidinamine
Synonym: U-58838
MF: C₉H₁₅N₅O₄S
FW: 289.3
Purity: ≥85%
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

Minoxidil sulfate is supplied as a solid. A stock solution may be made by dissolving the minoxidil sulfate in the solvent of choice, which should be purged with an inert gas. Minoxidil sulfate is slightly soluble in acetone, acetonitrile, and DMSO.

Description

Minoxidil sulfate is a hair follicle stimulator and an active metabolite of the vasodilator minoxidil (Item No. 15302).¹ It is formed from minoxidil by sulfotransferase 1A1 (SULT1A1) in the liver and hair root sheath.²⁻⁴ Minoxidil sulfate binds to ATP sensitive K⁺ (K_{ATP}) channels in a biphasic manner in COS-7 cells expressing the human channel with IC₅₀ values of 0.62 and 0.96 μM.^{5,6} It induces vasodilation in isolated rabbit mesenteric artery when used at a concentration of 5 μM.⁵

References

1. Buhl, A.E., Waldon, D.J., Baker, C.A., *et al.* Minoxidil sulfate is the active metabolite that stimulates hair follicles. *J. Invest. Dermatol.* **95**(5), 553-557 (1990).
2. Falany, C.N. and Kerl, E.A. Sulfation of minoxidil by human liver phenol sulfotransferase. *Biochem. Pharmacol.* **40**(5), 1027-1032 (1990).
3. Johnson, G.A. and Baker, C.A. Sulfation of minoxidil by human platelet sulfotransferase. *Clin. Chim. Acta* **169**(2-3), 217-227 (1987).
4. Dooley, T.P., Walker, C.J., Hirshey, S.J., *et al.* Localization of minoxidil sulfotransferase in rat liver and the outer root sheath of anagen pelage and vibrissa follicles. *J. Invest. Dermatol.* **96**(1), 65-70 (1991).
5. Meisheri, K.D., Oleynek, J.J., and Puddington, L. Role of protein sulfation in vasodilation induced by minoxidil sulfate, a K⁺ channel opener. *J. Pharmacol. Exp. Ther.* **258**(3), 1091-1097 (1991).
6. Schwanstecher, M., Sieverding, C., Dörschner, H., *et al.* Potassium channel openers require ATP to bind to and act through sulfonylurea receptors. *EMBO J.* **17**(19), 5529-5535 (1998).

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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