

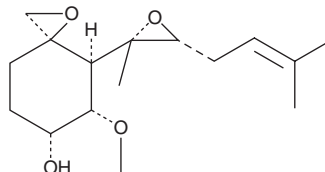
PRODUCT INFORMATION



Fumagillol

Item No. 39766

CAS Registry No.: 108102-51-8
Formal Name: (3R,4S,5S,6R)-5-methoxy-4-[(2R,3R)-2-methyl-3-(3-methyl-2-buten-1-yl)-2-oxiranyl]-1-oxaspiro[2.5]octan-6-ol
Synonyms: (-)-Fumagillol
MF: C₁₆H₂₆O₄
FW: 282.4
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Synthetic



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

Laboratory Procedures

Fumagillol is supplied as a solid. A stock solution may be made by dissolving the fumagillol in the solvent of choice, which should be purged with an inert gas. Fumagillol is soluble in chloroform, ethanol and methanol.

Description

Fumagillol is a sesquiterpenoid that has been found in *P. jensenii* and has diverse biological activities.¹⁻⁴ It is an inhibitor of methionyl aminopeptidase 2 (METAP2; IC₅₀ = 230 nM for the human enzyme).¹ Fumagillol is active against the parasite *G. lamblia* (IC₅₀ = 3.4 μM).² It reduces the proliferation of isolated calf pulmonary artery endothelial cells (IC₅₀ = 8.09 μM) and human umbilical vein endothelial cells (HUVECs; EC₅₀ = 49 nM).^{1,3} Fumagillol inhibits the proliferation of isolated mouse splenocytes in a mixed lymphocyte reaction (IC₅₀ = 250 nM).⁴

References

1. Fardis, M., Pyun, H.-J., Tario, J., *et al.* Design, synthesis and evaluation of a series of novel fumagillin analogues. *Bioorg. Med. Chem.* **11(23)**, 5051-5058 (2003).
2. Padia, J., Kulakova, L., Galkin, A., *et al.* Discovery and preclinical development of anti-giardiasis fumagillol derivatives. *Antimicrob. Agents Chemother.* **64(10)**, e00582-20 (2020).
3. Kim, D., Min, J., Ahn, S.K., *et al.* 5-Demethoxyfumagillol, a potent angiogenesis inhibitor isolated from *Aspergillus fumigatus*. *Chem. Pharm. Bull. (Tokyo)* **52(4)**, 447-450 (2004).
4. Hatanaka, H., Hashimoto, M., Tsurimi, Y., *et al.* FR65814, a novel immunosuppressant isolated from a *Penicillium* strain. Taxonomy, fermentation, isolation, physico-chemical and biological characteristics and structure assignment. *J. Antibiot. (Tokyo)* **41(8)**, 999-1008 (1988).

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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