

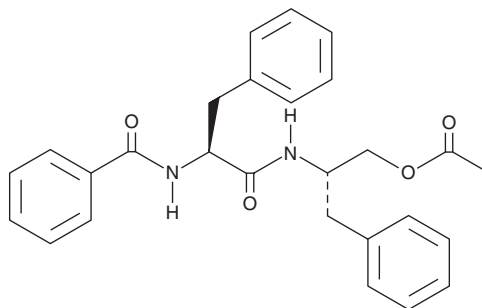
PRODUCT INFORMATION



Asperglaucide

Item No. 28499

CAS Registry No.: 56121-42-7
Formal Name: N-[(1S)-1-[(acetyloxy)methyl]-2-phenylethyl]- α S-(benzoylamino)-benzenepropanamide
Synonym: Aurantiamide Acetate
MF: C₂₇H₂₈N₂O₄
FW: 444.5
Purity: \geq 70%
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years
Item Origin: Fungus/*Aspergillus* sp.



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

Laboratory Procedures

Asperglaucide is supplied as a solid. A stock solution may be made by dissolving the asperglaucide in the solvent of choice, which should be purged with an inert gas. Asperglaucide is soluble in organic solvents such as ethanol and DMSO.

Description

Asperglaucide is an amide originally isolated from *P. aurantiacum* that has diverse biological activities, including anti-inflammatory, antibacterial, antioxidant, and anticancer properties.¹⁻⁴ Asperglaucide inhibits production of nitric oxide (NO), prostaglandin E₂ (PGE₂; Item No. 14010), and IL-1 β in LPS-stimulated BV-2 microglial cells (IC₅₀s = 49.7, 51.5, and 40.4 μ M, respectively).² It is active against Gram-negative bacteria (MICs = 0.05-0.10 mg/ml) and has antioxidant activity in 2,2-diphenyl-1-picrylhydrazyl (DPPH; Item No. 14805) and Trolox equivalent antioxidant capacity (TEAC) assays (EC₅₀s = 9.51-78.81 μ g/ml).³ Asperglaucide decreases viability of U87 and U251 cancer cells *in vitro* when used at concentrations ranging from 10 to 100 μ M and reduces tumor growth when administered at a dose of 1 mg *via* intratumoral injection in a U87 mouse xenograft model.⁴

References

1. Banerji, A. and Ray, R. Aurantiamides: A new class of modified dipeptides from *Piper aurantiacum*. *Phytochemistry* **20(9)**, 2217-2220 (1981).
2. Yoon, C.S., Kim, D.C., Lee, D.S., *et al.* Anti-neuroinflammatory effect of aurantiamide acetate from the marine fungus *Aspergillus* sp. SF-5921: Inhibition of NF- κ B and MAPK pathways in lipopolysaccharide-induced mouse BV2 microglial cells. *Int. Immunopharmacol.* **23(2)**, 568-574 (2014).
3. Tamokou, J.D., Simo Mpetga, D.J., Keilah Lunga, P., *et al.* Antioxidant and antimicrobial activities of ethyl acetate extract, fractions and compounds from stem bark of *Albizia adianthifolia* (Mimosoideae). *BMC Complement. Altern. Med.* **12**, 99 (2012).
4. Yang, Y., Zhang, L.H., Yang, B.X., *et al.* Aurantiamide acetate suppresses the growth of malignant gliomas *in vitro* and *in vivo* by inhibiting autophagic flux. *J. Cell. Mol. Med.* **19(5)**, 1055-1064 (2015).

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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