

Product Data Sheet

Product Name: Asperglaucide

Cat. No.: GC46885

Chemical Properties

Cas. No. 56121-42-7

SMILES O=C(N[C@@H](C1=CC=CC=C1)C(N[C@@H](C2=CC=CC=C2)COC(C)=O)=O)C3=CC=CC=C3

Formula $C_{27}H_{28}N_2O_4$

M.Wt 444.5

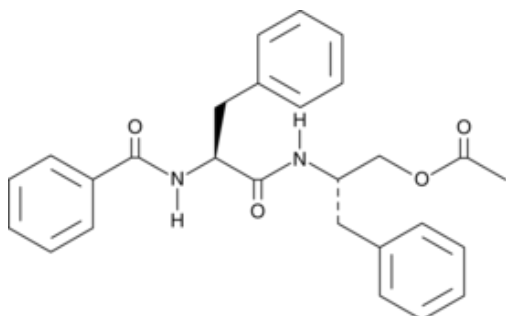
Solubility DMSO: soluble, Ethanol: soluble

Storage Store at -20°C, protect from light

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Asperglaucide is an amide originally isolated from *P. aurantiacum* that has diverse biological activities, including anti-inflammatory, antibacterial, antioxidant, and anticancer properties.^{1,2,3,4} Asperglaucide inhibits production of nitric oxide (NO), prostaglandin E₂, 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 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

Caution: Product has not been fully validated for medical applications. For research use only.

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1 mg *via* intratumoral injection in a U87 mouse xenograft model. ⁴

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. 1299(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)

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