

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

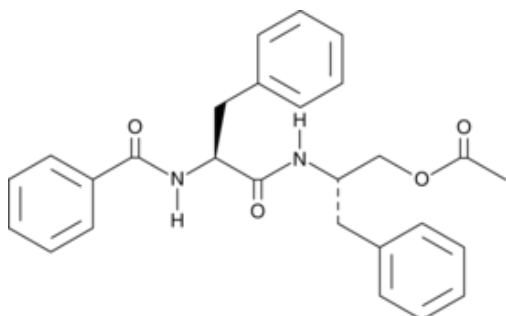
Solubility DMSO: soluble, Ethanol: soluble

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-1β in LPS-stimulated BV-2 microglial cells (IC₅₀s = 49.7, 51.5, and 40.4 μM, 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 μg/ml).³ Asperglaucide decreases viability of U87 and U251 cancer cells *in vitro* when used at concentrations ranging from 10 to 100 μM and reduces tumor growth when administered at a dose of

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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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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