

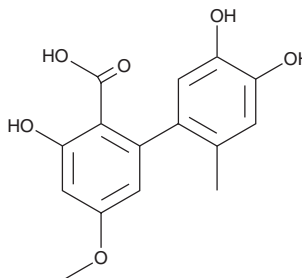
PRODUCT INFORMATION



Altenusin

Item No. 26911

CAS Registry No.: 31186-12-6
Formal Name: 3,4,5'-trihydroxy-5-methoxy-2'-methyl-[1,1'-biphenyl]-2-carboxylic acid
Synonym: Alutenusin
MF: C₁₅H₁₄O₆
FW: 290.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Fungus/*Penicillium* sp.



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

Laboratory Procedures

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

Description

Altenusin is a polyphenol fungal metabolite originally isolated from the fungus *Alternaria* that has diverse biological activities.^{1,2} It inhibits Src kinase with an IC₅₀ value of 20 nM.³ Altenusin inhibits fibrillation of recombinant tau fragments *in vitro* and phosphorylation of tau in SH-SY5Y cells expressing human P301L mutant tau when used at a concentration of 10 μM.¹ It is an agonist of the farnesoid X receptor (FXR; EC₅₀ = 3.2 μM) that reduces blood glucose, serum insulin, and serum cholesterol levels, as well as hepatic lipogenic gene expression and steatosis, in a high fat diet-induced mouse model of obesity when administered at 30 mg/kg per day.² Altenusin also has antioxidant and antifungal properties.

References

1. Chua, S.W., Cornejo, A., van Eersel, J., *et al.* The polyphenol altenusin inhibits *in vitro* fibrillation of tau and reduces induced tau pathology in primary neurons. *ACS Chem. Neurosci.* **8(4)**, 743-751 (2017).
2. Zheng, Z., Zhao, Z., Li, S., *et al.* Altenusin, a nonsteroidal microbial metabolite, attenuates nonalcoholic fatty liver disease by activating the farnesoid X receptor. *Mol. Pharmacol.* **92(4)**, 425-436 (2017).
3. Oyama, M., Xu, Z., Lee, K.-H., *et al.* Fungal metabolites as potent protein kinase inhibitors: Identification of a novel metabolite and novel activities of known metabolites. *Lett. Drug. Des. Discov.* **100(1)**, 24-29 (2004).

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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