

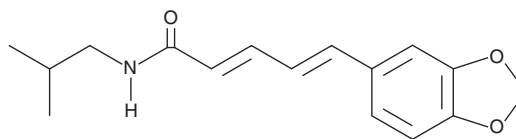
PRODUCT INFORMATION



Piperlonguminine

Item No. 9001155

CAS Registry No.: 5950-12-9
Formal Name: 5-(1,3-benzodioxol-5-yl)-N-(2-methylpropyl)-2E,4E-pentadienamide
Synonyms: N-Isobutylpiperamide, NSC 125178
MF: C₁₆H₁₉NO₃
FW: 273.3
Purity: ≥98%
UV/Vis.: λ_{max}: 242, 252, 308, 339 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Piperlonguminine is supplied as a crystalline solid. A stock solution may be made by dissolving the piperlonguminine in the solvent of choice, which should be purged with an inert gas. Piperlonguminine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of piperlonguminine in ethanol is approximately 3 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Piperlonguminine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, piperlonguminine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Piperlonguminine has a solubility of approximately 5 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Piperlonguminine is an alkaloid amide from species of the genus *Piper*, a plant used in traditional medicine that demonstrates antifungal, anticancer, antihyperlipidemic, and anti-inflammatory properties.^{1,2} Piperlonguminine (3-12.5 μM) has been shown to dose dependently decrease expression of amyloid precursor protein and amyloid-β peptide in human neuroblastoma cells, suggesting it may have implication in treating Alzheimer's disease.³

References

1. Kumar, S., Kamboj, J., Suman, *et al.* Overview for various aspects of the health benefits of *Piper longum* Linn. fruit. *J. Acupunct. Meridian Stud.* **4(2)**, 134-140 (2011).
2. Silva, D.R., Baroni, S., Svidzinski, A.E., *et al.* Anti-inflammatory activity of the extract, fractions and amides from the leaves of *Piper ovatum* Vahl (Piperaceae). *J. Ethnopharmacol.* **116(3)**, 569-573 (2008).
3. Qi, H.-S., Liu, P., Gao, S.-Q., *et al.* Inhibitory effect of piperlonguminine/dihydropiperlonguminine on the production of amyloid β and APP in SK-N-SH cells. *Chin. J. Physiol.* **52(3)**, 160-168 (2009).

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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