PRODUCT INFORMATION

Piperlonguminine
Item No. 9001155

CAS Registry No.: 5950-12-9
Formal Name: 5-(1,3-benzodioxol-5-yl)-N-(2-
 methypropyl)-2E,4E-pentadienamide
Synonyms: N-Isobutylpiperamide, NSC 125178
MF: C16H19NO3
FW: 273.3
Purity: ≥ 98%
UV/Vis.: λmax: 242, 252, 308, 339 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

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