**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**