

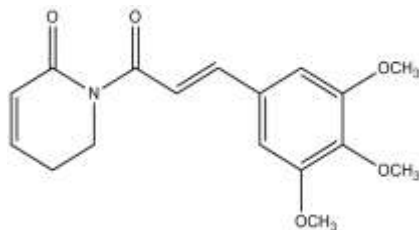
## Piperlongumine

**ALTERNATE NAME:** (E)-1-(3-(3,4,5-Trimethoxyphenyl)acryloyl)-5,6-dihydropyridin-2(1H)-one; 1-[(2E)-3-(3,4,5-trimethoxyphenyl)prop-2-enoyl]-5,6-dihydropyridin-2(1H)-one; Piplartine

**CATALOG #:** 1919-10, 50

**AMOUNT:** 10 mg, 50 mg

**STRUCTURE:**



**MOLECULAR FORMULA:** C<sub>17</sub>H<sub>19</sub>NO<sub>5</sub>

**MOLECULAR WEIGHT:** 317.34

**CAS NUMBER:** 20069-09-4

**APPEARANCE:** White to off-white solid

**SOLUBILITY:** DMSO (~25 mg/ml)

**PURITY:** ≥98% by HPLC

**STORAGE:** Store at -20 °C. Protect from light

**DESCRIPTION:** A constituent of the pepper *Piper longum* L. that selectively kills cancer cells but not normal cells. Piperlongumine increases the level of reactive oxygen species (ROS) and apoptotic cell death in both cancer cells and normal cells engineered to have a cancer genotype, irrespective of p53 status, but it has little effect on either rapidly or slowly dividing primary normal cells. Also potently inhibits the growth of spontaneously formed malignant breast tumors and their associated metastases in mice.

**REFERENCE:** Raj, L., *et al.* (2011). *Nature* **475**, 231-234.

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

**FOR RESEARCH USE ONLY! Not to be used on humans.**

### RELATED PRODUCTS:

- Ascorbic Acid Assay Kit (**Cat. No. K661-100**)
- Ascorbic Acid Assay Kit II (FRASC) (**Cat. No. K671-100**)
- Betulinic Acid (**Cat. No. 1552-25**)
- Bexarotene (**Cat. No. 1575-5, 50**)
- Capecitabine (Cat. No. 1741-100, 1000)
- Carboplatin (**Cat. No. 1553-100**)
- Cisplatin (**Cat. No. 1550-100,1000**)
- Daunorubicin.HCl (**1524-10,50,500**)
- Doxorubicin HCl (**Cat. No. 1527-5**)
- (-)-Epigallocatechin gallate (**Cat. No. 1841-50**)
- Fludarabine Phosphate (**Cat. No. 1763-10, 50**)
- Gemcitabine Hydrochloride (**Cat. No. 1759-25, 100**)
- Genistein (**Cat. No. 1533-10**)
- Glutathione (GSH/GSSG Total) Assay Kit (**Cat. No. K264-100**)
- Glutathione Colorimetric Assay Kit (**Cat. No. K261-100**)
- Glutathione Fluorometric Assay Kit (**Cat. No. K251-100**)
- Glutathione Peroxidase Assay Kit (**Cat. No. K762-100**)
- Glutathione Reductase Assay Kit (**Cat. No. K761-100**)
- GST Colorimetric Assay Kit (**Cat. No. K263-100**)
- GST Fluorometric Assay Kit (**Cat. No. K263-100**)
- Hydrogen Peroxide Assay Kit (**Cat. No. K265-100**)
- Nedaplatin (**Cat. No. 1576-5**)
- Nitric Oxide Colorimetric Assay Kit (**Cat. No. K263-100**)
- Nitric Oxide Fluorometric Assay Kit (**Cat. No. K252-100**)
- Oxaliplatin (**Cat. No. 1577-25**)
- Paclitaxel (**Cat. No. 1567-25**)
- Resveratrol (**Cat. No. 1758-100, 500**)
- Rosmarinic Acid (**Cat. No. 1843-50, 250**)
- SOD Activity Assay Kit (**Cat. No. K335-100**)
- Tamoxifen Citrate (**Cat. No. 1551-1000**)
- Thioredoxin Reductase Assay Kit (**Cat. No. K763-100**)
- Tiliroside (**Cat. No. 1879-1,5**)
- Total Antioxidant Capacity Assay Kit (**Cat. No. K274-100**)
- Uric Acid Assay Kit (**Cat. No. K608-100**)
- Xanthine Oxidase Assay Kit (**Cat. No. K710-100**)