

## Piperlongumine, Glutathione sponge; Increases ROS

Catalog	Unit
TBI2377-20MG	20mg
TBI2377-100MG	100mg

### Product Details

**Formal Name:** (E)-1-(3-(3,4,5-trimethoxyphenyl)acryloyl)-5,6-dihydropyridin-2(1H)-one

**Molecular Formula:** C<sub>17</sub>H<sub>19</sub>NO<sub>5</sub>

**Formula Weight:** 317.34

**CAS Number:** 20069-09-4

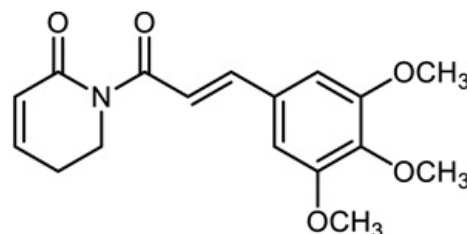
**Purity:** >98%

**Formulation:** powder

**Solubility:** Soluble in DMSO (up to 25 mg/ml).

**Storage:** RT

**Stability:** ≥ 2 years.



### Applications

Glutathione sponge; Increases ROS

### Functions

Elevates cellular levels of reactive oxygen species selectively in cancer cell lines. Irreversible glutathionylation leading to depletion of cellular glutathione is associated with its cellular toxicity. Piperlongumine does not appear to have any effect on normal cells. Displays anti-tumor effects in a mouse xenograft tumor model as well as in spontaneously formed malignant breast tumors in mice. Elevation of ROS levels may be due to inhibition of ubiquitin-proteasome system at a pre-proteasomal step.

### Application Procedures

First dissolved in DMSO (up to 25 mg/ml), then diluted to aqueous buffer. Solutions in water may be stored at -20°C for up to 3 months.

**For research use only.**