

Catalog	Unit
TBI4517-5MG	5 mg
TBI4517-25MG	25 mg

### Product Details

**Formal Name:** 3-Phenyl-N-[2,2,2-trichloro-1-[(8-quinolinylamino)thioxomethyl]amino]ethyl]-2-propenamide

**Molecular Formula:** C<sub>21</sub>H<sub>17</sub>Cl<sub>3</sub>N<sub>4</sub>OS

**Formula Weight:** 479.81

**CAS Number:** 405060-95-9

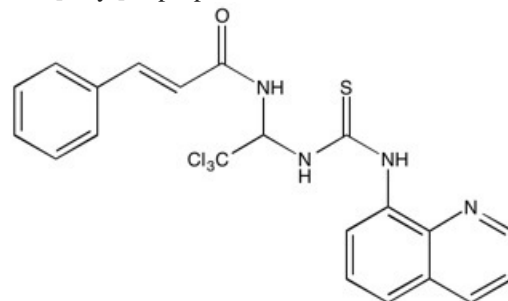
**Purity:** >98%

**Formulation:** powder

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

**Storage:** -20°C

**Stability:**  $\geq$  1 year.



### Applications

eIF2 $\alpha$  Phosphatase inhibitor; ER stress inhibitor

### Functions

Endoplasmic reticulum (ER) stress inhibitor. Salubrinal is a selective inhibitor of cellular complexes that dephosphorylate eukaryotic initiation factor 2 subunit alpha (eIF2 $\alpha$ ). It has been found to interact with the anti-apoptotic protein Bcl-2 offering protection from the apoptotic and autophagic effects that result from loss of Bcl-2 function. Salubrinal blocked NFATc1 expression and osteoclast differentiation by RANKL via phosphorylation of eIF2 $\alpha$  resulting in a decrease of global protein synthesis. It efficiently blocked osteoporosis in a mouse model treated with RANKL.

### Application Procedures

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

**For research use only.**