

Catalog	Unit
TBI1518-5MG	5 mg
TBI1518-25MG	25 mg

### Product Details

**Formal Name:** 2-(4-Morpholinyl)-6-(1-thiamthrenyl)-4H-pyran-4-one

**Molecular Formula:** C<sub>21</sub>H<sub>17</sub>NO<sub>3</sub>S<sub>2</sub>

**Formula Weight:** 395.50

**CAS Number:** 587871-26-9

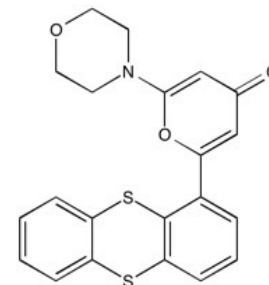
**Purity:** >98%

**Formulation:** powder

**Solubility:** Soluble in DMSO (up to 40 mg/ml) or in Ethanol (up to 20 mg/ml)

**Storage:** -20°C

**Stability:** ≥ 2 years.



### Applications

ATM Kinase inhibitor

### Functions

Potent and selective ATM kinase inhibitor IC<sub>50</sub>s= 13, 2500, 9300, 16600, >100000 and >100000 nM for ATM, DNA-PK, mTOR, PI 3-kinase, PI 4-K and ATR respectively. Decreases viability of MCF-7, A549 and HCT116 cells and decreases p21CIP1 levels in vitro. Disruption of ATM signaling in primary A-T fibroblasts leads to dysregulation of ribonucleotide reductase and increase resistance to inhibitors of mitochondrial respiration and translation. Sensitizes radio-resistant cancer cells. Provides neuroprotection against H<sub>2</sub>O<sub>2</sub>-induced cell damage.

### Application Procedures

First dissolved in DMSO (up to 40 mg/ml) or in Ethanol (up to 20 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20° for up to 1 month.

**For research use only.**