

Catalog	Unit
TBI4250-10MG	10 mg
TBI4250-50MG	50 mg

### Product Details

**Formal Name:** 7-Chloro-5-(2-chlorophenyl)-1,5-dihydro-4,1-benzothiazepin-2(3H)-one

**Molecular Formula:** C<sub>15</sub>H<sub>11</sub>Cl<sub>2</sub>NOS

**Formula Weight:** 324.22

**CAS Number:** 75450-34-9

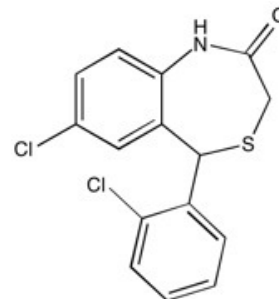
**Purity:** >99%

**Formulation:** powder

**Solubility:** Soluble in DMSO (up to 30 mg/ml).

**Storage:** RT

**Stability:** ≥ 2 years.



### Applications

Mitochondrial Na<sup>+</sup>/Ca<sup>2+</sup> exchanger inhibitor

### Functions

Inhibits the mitochondrial Na<sup>+</sup>-Ca<sup>2+</sup> exchanger (NCX) in isolated heart mitochondria, IC<sub>50</sub>=0.36 μM. Does not inhibit the plasmalemmal NCX. Also inhibits voltage-gated Ca<sup>2+</sup> channels in intact cells and therefore its use in cellular studies must employ adequate controls. Prevents sudden death in a Guinea pig model of heart failure. Displays pronounced cytoprotective effects in chromaffin cells and in neuronal injury models. Blood-brain barrier permeant.

### Application Procedures

First dissolved in DMSO (up to 30 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

**For research use only.**