

Catalog	Unit
TBI3005-5MG	5 mg
TBI3005-25MG	25 mg

### Product Details

**Formal Name:** N-Benzyloxycarbonylvalylphenylalaninal

**Alternate Names:** Z-Val-Phe-CHO; Calpain Inhibitor III

**Molecular Formula:** C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub>

**Formula Weight:** 382.40

**CAS Number:** 88191-84-8

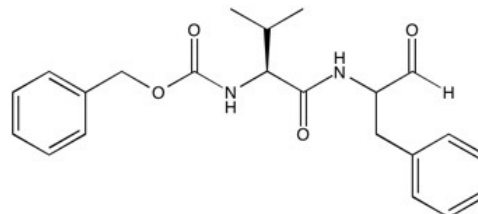
**Purity:** >98%

**Formulation:** powder

**Solubility:** Soluble in DMSO (up to 75 mg/ml)

**Storage:** -20°C

**Stability:** ≥ 1 year.



### Applications

Calpain inhibitor

### Functions

A potent and selective cell permeable calpain inhibitor. Inhibits oxidative damage-induced apoptosis in PC12 cells and capsaicin-induced apoptosis in dorsal root ganglion neurons. It penetrates the blood-brain barrier and inhibits brain cysteine protease activity after systemic administration, ameliorating brain damage in a gerbil model of global ischemia. Displays neuroprotective effects in neurotrauma rodent models. Calpain I Ki = 8 nM; Cathepsin B Ki = 24 nM in isolated enzyme assays. IC50 = 0.3 μM in intact cell assay.

### Application Procedures

First dissolved in DMSO (up to 75 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 1 month.

**For research use only.**