

## PAC-1, Procaspase-3 activator

Catalog	Unit
TBI2979-5MG	5 mg
TBI2979-25MG	25 mg

## **Product Details**

Formal Name: 4-(Phenylmethyl)-1-piperazineacetic acid [[2-hydroxy-3-(2-propenyl)phenyl]-methylene]hydrazide

Molecular Formula: C<sub>23</sub>H<sub>28</sub>N<sub>4</sub>O<sub>2</sub>

**Formula Weight:** 392.49 **CAS Number:** 315183-21-2

**Purity:** >98%

Formulation: powder

**Solubility:** Soluble in DMSO (up to 35 mg/ml) or in Ethanol (up to 15 mg/ml)

Storage:  $-20^{\circ}$ C Stability:  $\geq 1$  year.

# **Applications**

Procaspase-3 activator

#### **Functions**

PAC-1 is a procaspase-activating compound, directly activating procaspase-3, producing caspase-3, EC50=0.22  $\mu$ M. It is less potent at activating procaspase-7, EC50=4.5  $\mu$ M. It induces apoptosis in a variety of cancer cell lines. The mechanism of activation involves sequestering inhibitory zinc ions thus allowing procaspase-3 to autoactivate. Sensitizes cancer cells to various chemotherapeutic agents.

### **Application Procedures**

First dissolved in DMSO (up to 35 mg/ml) or in Ethanol (up to 15 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol must be stored under inert gas at -80°C and will be stable for up to 2 months.

For research use only.