

# Sphingosine, PKC inhibitor

Catalog	Unit
TBI2287-20MG	20mg
TBI2287-100MG	100mg

### **Product Details**

Formal Name: (2S,3R,4E)-2-Amino-4-octadecene-1,3-diol

**Alternate Names:** D(+)-erythro-1,3-Dihydroxy-2-amino-4-trans-octadecene

**Molecular Formula:** C<sub>18</sub>H<sub>37</sub>NO<sub>2</sub> **Formula Weight:** 299.50 **CAS Number:** 123-78-4

**Purity:** >98%

Formulation: powder

**Solubility:** Soluble in DMSO (up to 25 mg/ml with warming) or in Ethanol (up to 25 mg/ml with warming).

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

### **Applications**

PKC inhibitor

#### **Functions**

Endogenous sphingolipid found in cells esterified as phosphatidylcholine (sphingomyelin) and released by the action of sphingomyelinases. Potent and selective inhibitor of protein kinase C (IC50=1-3  $\mu$ M). Inhibition is competitive with DAG, phorbol esters and Ca2+. May be phosphorylated by sphingosine kinases producing sphingosine-1-phosphate, a bioactive lipid producing a plethora of biological effects.

## **Application Procedures**

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

For research use only.