

# Bilobalide

**Catalog No: tcsc1517**



## Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

33570-04-6

**Formula:**

$C_{15}H_{18}O_8$

**Pathway:**

Autophagy

**Target:**

Autophagy

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

(-)-Bilobalide

**Observed Molecular Weight:**

326.3

## Product Description

Bilobalide is a biologically active terpenic trilactone present in Ginkgo biloba. An increasing number of studies have demonstrated its neuroprotective effects.

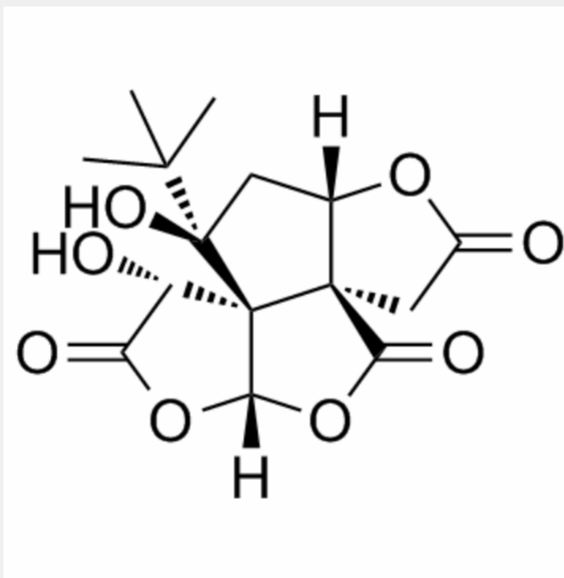
IC50 Value: 3.33 (pIC50 Value) [1]

Target: neuroprotective

in vitro: Inhibition by BB and GB was abolished in mutant receptors containing T6\A and S12\A substitutions, but their potencies were enhanced (42- and 125-fold, respectively) in S2\A mutant receptors [1]. BB enhanced the secretion of  $\alpha$ -secretase-cleaved soluble amyloid precursor protein (sAPP $\alpha$ , a by-product of non-amyloidogenic processing of APP) and decreased the  $\beta$  amyloid protein (A $\beta$ , a by-product of amyloidogenic processing of APP) via PI3K-dependent pathway [2].

in vivo: Oral administration of bilobalide (10-30 mg/kg) significantly inhibited thermal hyperalgesia in response to carrageenan, capsaicin and paw incision, independent of dose, with an efficacy similar to that of diclofenac. In the carrageenan model, mechanical hypersensitivity and paw oedema were also significantly reduced after treatment with bilobalide (10-30 mg/kg) [3]. BB(4 and 8 mg/kg) significantly protected VD rats against cognitive deficits in the Morris water maze. Biochemical assessment showed that BB (4 and 8 mg/kg) increased superoxide dismutase (SOD) activity and glutathione (GSH) content, and decreased nitric oxide synthase (NOS) activity and malondialdehyde (MDA) content [4].

Clinical trial: N/A



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!