# Etbicyphat

**Cat. No.:** HY-139145

**CAS No.:** 1005-93-2

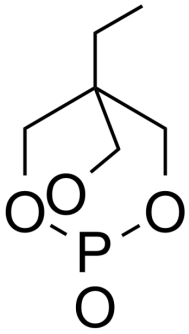
**Molecular Formula:** $C_6H_{11}O_4P$

**Molecular Weight:** 178.12

**Target:** GABA Receptor

**Pathway:** Membrane Transporter/Ion Channel; Neuronal Signaling

**Storage:** 4°C, protect from light
* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : ≥ 100 mg/mL (561.42 mM)
* "≥" means soluble, but saturation unknown.

**Preparing Stock Solutions**

| Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 5.6142 mL | 28.0710 mL | 56.1419 mL |
| 5 mM | 1.1228 mL | 5.6142 mL | 11.2284 mL |
| 10 mM | 0.5614 mL | 2.8071 mL | 5.6142 mL |

Please refer to the solubility information to select the appropriate solvent.

**In Vivo**

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (14.04 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (14.04 mM); Clear solution

## BIOLOGICAL ACTIVITY

**Description**

Etbicyphat (Trimethylopropane phosphate) is a potent GABA(A) receptors competitive antagonist. Etbicyphat induces epileptiform activities in hippocampal CA1 neurons, and binds to the GABA(A)-benzodiazepine receptors[1].

**$IC_{50}$ & Target**

GABA(A)[1]

## REFERENCES

[1]. Rijal SO, et al. Dissociation constants for GABA(A) receptor antagonists determined with neuronal networks on microelectrode arrays. J Neurosci Methods. 2008 Aug

30;173(2):183-92.



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