



#### GABOB (beta-hydroxy-GABA)

# **Chemical Properties**

CAS No.: 7013-05-0
Formula: C4H9NO3
Molecular Weight: 119.12
Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).

# **Biological Description**

Description

GABOB is an anticonvulsant used to treat epilepsy. GABOB is an endogenous active metabolite, it is analogue to the neurotransmitter  $\gamma$ -aminobutyric acid (GABA), therefore may function as a neurotransmitter.

## Solubility Information

Solubility	Water: Insoluble	
	DMSO: Soluble	

(< 1 mg/ml refers to the product slightly soluble or insoluble)

#### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	8.395 mL	41.974 mL	83.949 mL
5 mM	1.679 mL	8.395 mL	16.790 mL
10 mM	0.839 mL	4.197 mL	8.395 mL
50 mM	0.168 mL	0.839 mL	1.679 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

#### Reference

- 1. Yamamoto I, Absalom N, Carland JE, Doddareddy MR, Gavande N, Johnston GA, Hanrahan JR, Chebib M. Differentiating enantioselective actions of GABOB: a possible role for threonine 244 in the binding site of GABA(C) p(1) receptors. ACS Chem Neurosci. 2012 Sep 19;3(9):665-73. Epub 2012 Apr 26. PubMed PMID: 23019493; PubMed Central PMCID: PMC3447397.
- 2. Du Z, Chen Z, Chen Z, Yu X, Hu W. Dirhodium-catalyzed enantioselective C-H insertion of N-(2-benzyloxyethyl)-N-(tert-butyl)diazoacetamide and its application for the synthesis of chiral GABOB. Chirality. 2004 Oct;16(8):516-9. PubMed PMID: 15290686.
- 3. Nakao J, Hasegawa T, Hashimoto H, Noto T, Nakajima T. Formation of GABOB from 2-hydroxyputrescine and its anticonvulsant effect. Pharmacol Biochem Behav. 1991 Oct;40(2):359-66. PubMed PMID: 1805240.
- 4. Banfi S, Fonio W, Allievi E, Pinza M, Dorigotti L. Cyclic GABA-GABOB analogues. IV. Activity on learning and memory. Farmaco Sci. 1984 Jan;39(1):16-22. PubMed PMID: 6538512.

Page 1 of 2 www.targetmol.com

### Inhibitors · Natural Compounds · Compound Libraries

This product is for Research Use Only  $\cdot$  Not for Human or Veterinary or Therapeutic Use.

Tel:781-999-4286

E-mail:info@targetmol.com

Address:36 Washington Street, Wellesley Hills, MA 02481

Page 2 of 2 www.targetmol.com