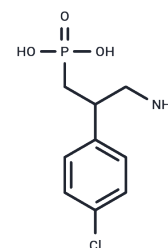


## Phaclofen

## Chemical Properties

CAS No. :	114012-12-3
Formula:	C <sub>9</sub> H <sub>13</sub> ClNO <sub>3</sub> P
Molecular Weight:	249.63
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Phaclofen (3-Amino-2-(4-chlorophenyl)propanephosphonic acid) is a selective GABAB receptor antagonist, which can partially antagonize the sedative effect of (-)-baclofen, and reversibly antagonize the inhibition of cholinergic convulsive response of guinea pig ileum and distal colon by baclofen or GABA. Inhibits the cholinergic convulsive response in the guinea pig ileum and distal colon by baclofen or GABA.
Targets(IC50)	GABA Receptor
In vivo	In Sprague-Dawley rats (180-250 g), Phaclofen (2 mg/kg; intraperitoneal injection) reduced the number of neuropeptide Y-like immunoreactive fibers in the stimulated cuneate nucleus[4].

## Solubility Information

Solubility	1eq. NaOH: <6.24 mg/mL, Sonication is recommended. H <sub>2</sub> O: 30 mg/mL (120.18 mM), when pH is adjusted with NaOH. Sonication is recommended. DMSO: < 1 mg/mL (23.90 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

### Preparing Stock Solutions

---

	1mg	5mg	10mg
1 mM	4.0059 mL	20.0296 mL	40.0593 mL
5 mM	0.8012 mL	4.0059 mL	8.0119 mL
10 mM	0.4006 mL	2.003 mL	4.0059 mL
50 mM	0.0801 mL	0.4006 mL	0.8012 mL

---

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

- Johnson CM, et al. The antitussive cloperastine improves breathing abnormalities in a Rett Syndrome mouse model by blocking presynaptic GIRK channels and enhancing GABA release. *Neuropharmacology*. 2020;176:108214.
- Kerr DI, et al. Phaclofen: a peripheral and central baclofen antagonist. *Brain Res*. 1987;405(1):150-154.
- Wüllner U, et al. Phaclofen antagonizes the depressant effect of baclofen on spinal reflex transmission in rats. *Brain Res*. 1989;496(1-2):341-344.
- Chen SH, et al. Changes in GABA and GABA(B) receptor expressions are involved in neuropathy in the rat cuneate nucleus following median nerve transection. *Synapse*. 2012; 66(6):561-572.
- Abellán MT, et al. Dual control of dorsal raphe serotonergic neurons by GABA(B) receptors. *Electrophysiological and microdialysis studies*. *Synapse*. 2000;36(1):21-34.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481