

# **Product** Data Sheet

### CGP35348

Cat. No.:HY-103530CAS No.:123690-79-9Molecular Formula: $C_8H_{20}NO_4P$ Molecular Weight:225.22

Target: GABA Receptor

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

Storage: Pure form -20°C 3 years

4°C 2 years

In solvent -80°C 6 months

-20°C 1 month

$$\begin{array}{c|c}
 & O \\
O & O \\
P & \\
O & O
\end{array}$$

$$\begin{array}{c|c}
 & O \\
P & \\
O & O
\end{array}$$

$$\begin{array}{c|c}
 & O \\
P & \\
O & O
\end{array}$$

$$\begin{array}{c|c}
 & O \\
O & O \\
O & O
\end{array}$$

### **SOLVENT & SOLUBILITY**

In Vitro

H<sub>2</sub>O: 83.33 mg/mL (369.99 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	4.4401 mL	22.2005 mL	44.4010 mL
	5 mM	0.8880 mL	4.4401 mL	8.8802 mL
	10 mM	0.4440 mL	2.2201 mL	4.4401 mL

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

In Vivo

1. Add each solvent one by one: PBS

Solubility: 25 mg/mL (111.00 mM); Clear solution; Need ultrasonic

## **BIOLOGICAL ACTIVITY**

**Description** CGP 35348 is a selective, brain penetrant, centrally active GABAB receptor antagonist with an EC<sub>50</sub> of 34 μM. CGP 35348

shows affinity for the GABAB receptor only [1]. CGP 35348 has a potential to improve neuromuscular coordination and spatial

learning in albino mouse following neonatal brain damage  $\ensuremath{^{[2]}}.$ 

In Vivo CGP 35348 enhances non-REM sleep and rapid eye movement (REM) sleep and reduces strongly spike-wave discharges<sup>[3]</sup>.

 $\label{eq:mce} \mbox{MCE has not independently confirmed the accuracy of these methods. They are for reference only.}$ 

Animal Model:	Eight male Wistar rats <sup>[3]</sup>
Dosage:	100, 300, and 900 mg/kg
Administration:	Intraperitoneally given

Result:	Produced an increase in the duration of REM sleep compared to the saline-injected control group at 100 and 300 mg/kg.			

#### **REFERENCES**

- [1]. H R Olpe, et al. CGP 35348: a centrally active blocker of GABAB receptors. CGP 35348: a centrally active blocker of GABAB receptors
- [2]. Q Gillani, et al. CGP 35348, GABA B receptor antagonist, has a potential to improve neuromuscular coordination and spatial learning in albino mouse following neonatal brain damage. Biomed Res Int. 2014;2014:295215.
- [3]. A Puigcerver, et al. Effects of the GABAB antagonist CGP 35348 on sleep-wake states, behaviour, and spike-wave discharges in old rats. Brain Res Bull. 1996;40(3):157-62.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA