

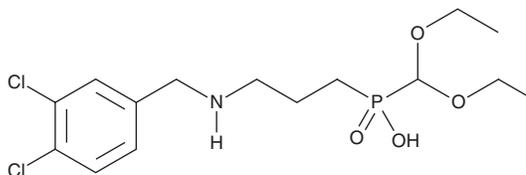
PRODUCT INFORMATION



CGP 52432

Item No. 27212

CAS Registry No.: 139667-74-6
Formal Name: P-[3-[[[(3,4-dichlorophenyl)methyl]amino]propyl]-P-(diethoxymethyl)-phosphinic acid
MF: C₁₅H₂₄Cl₂NO₄P
FW: 384.2
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CGP 52432 is supplied as a solid. A stock solution may be made by dissolving the CGP 52432 in the solvent of choice, which should be purged with an inert gas. CGP 52432 is soluble in the organic solvent DMSO.

Description

CGP 52432 is an antagonist of GABA_B receptors.¹ It selectively reverses (-)-baclofen-induced inhibition of potassium-evoked GABA release over glutamate or somatostatin release (IC₅₀s = 0.085, 3.35, and 9.26 μM, respectively) from rat cortical synaptosomes. CGP 52432 (10 μM) reduces paired-pulse inhibition of monosynaptic inhibitory potentials (IPSPs) by 80% in CA1 pyramidal neurons in rat hippocampal slices.² It increases cell proliferation in the ventral subgranular zone of the dentate gyrus when administered at a dose of 3 mg/kg per day for 21 days and reduces immobility in the forced-swim test when administered at 10 mg/kg in stress-sensitive BALB/c mice.³ CGP 52432 (30 mg/kg) increases locomotor activity in mice.⁴ It also inhibits the analgesic effects of isovaline, GABA, and baclofen (Item No. 18600) in a mouse model of hindpaw allodynia induced by prostaglandin E₂ (PGE₂; Item No. 14010).⁵

References

1. Lanza, M., Fassio, A., Gemignani, A., *et al.* CGP 52432: A novel potent and selective GABA_B autoreceptor antagonist in rat cerebral cortex. *Eur. J. Pharmacol.* **237(2-3)**, 191-195 (1993).
2. Olpe, H.-R., Steinmann, M.W., Greiner, K., *et al.* Contribution of presynaptic GABA-B receptors to paired-pulse depression of GABA-responses in the hippocampus. *Naunyn Schmiedebergs Arch. Pharmacol.* **349(5)**, 473-477 (1994).
3. Felice, D., O'Leary, O.F., Pizzo, R.C., *et al.* Blockade of the GABA_B receptor increases neurogenesis in the ventral but not dorsal adult hippocampus: Relevance to antidepressant action. *Neuropharmacology* **63(8)**, 1380-1388 (2012).
4. Colombo, G., Melis, S., Brunetti, G., *et al.* GABA_B receptor inhibition causes locomotor stimulation in mice. *Eur. J. Pharmacol.* **433(1)**, 101-104 (2001).
5. Whitehead, R.A., Puil, E., Ries, C.R., *et al.* GABA_B receptor-mediated selective peripheral analgesia by the non-proteinogenic amino acid, isovaline. *Neuroscience* **213**, 154-160 (2012).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM