PRODUCT INFORMATION



(±)-Baclofen

Item No. 18600

CAS Registry No.: 1134-47-0

Formal Name: β-(aminomethyl)-4-chloro-

benzenepropanoic acid

MF: $C_{10}H_{12}CINO_2$

FW: 213.7 **Purity:** ≥98%

 λ_{max} : 220, 266 nm A crystalline solid UV/Vis.: Supplied as:

-20°C Storage: Stability: ≥4 vears

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

Laboratory Procedures

(±)-Baclofen is supplied as a crystalline solid. A stock solution may be made by dissolving the (±)-baclofen in water. The solubility of (±)-baclofen in water is approximately 4 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

(±)-Baclofen is a GABA_B receptor agonist (IC $_{50}$ = 180 nM). It induces norepinephrine release from isolated rat atria (IC $_{50}$ = 4.5 μ M). (±)-Baclofen (10 mg/kg) increases muscle rigidity in spastic mice. It inhibits the norepinephrine-induced group II flexor reflex in anesthetized rats.³ (\pm)-Baclofen also reduces cocaineinduced hyperlocomotion in rats and binge-like ethanol intake in mice. 4,5 Formulations containing baclofen have been used to treat muscle spasms caused by multiple sclerosis and spinal cord injury

References

- 1. Hill, D.R. and Bowery, N.G. ³H-baclofen and ³H-GABA bind to bicuculline-insensitive GABA_B sites in rat brain. Nature 290(5802), (1981).
- 2. Biscoe, T.J. and Fry, J.P. Some pharmacological studies on the spastic mouse. Br. J. Pharmacol. 75(1), 23-25 (1982).
- 3. Sakitani, K. The effects of centrally acting muscle relaxants on the intrathecal noradrenaline-induced facilitation of the flexor reflex mediated by group II afferent fibers in rats. Jpn. J. Pharmacol. 63(3), 369-376 (1993).
- 4. Lhuillier, L., Mombereau, C., Cryan, J.F., et al. GABA_R receptor-positive modulation decreases selective molecular and behavioral effects of cocaine. Neuropsychopharmacology 32(2), 388-398 (2007).
- Moore, E.M. and Boehm, S.L., II Site-specific microinjection of baclofen into the anterior ventral tegmental area reduces binge-like ethanol intake in male C57BL/6J mice. Behav. Neurosci. 123(3), 555-563 (2009).

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

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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