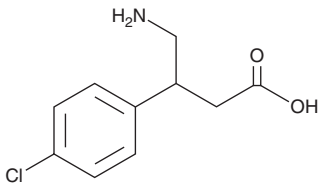
PRODUCT INFORMATION

(±)-Baclofen

Item No. 18600

CAS Registry No.:	1134-47-0
Formal Name:	β-(aminomethyl)-4-chloro-benzenepropanoic acid
MF:	$C_{10}H_{12}ClNO_2$
FW:	213.7
Purity:	≥98%
UV/Vis.:	λ_{max}: 220, 266 nm
Supplied as:	A crystalline 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

(±)-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).[1] It induces norepinephrine release from isolated rat atria (IC_{50} = 4.5 µM). (±)-Baclofen (10 mg/kg) increases muscle rigidity in spastic mice.[2] It inhibits the norepinephrine-induced group II flexor reflex in anesthetized rats.[3] (±)-Baclofen also reduces cocaine-induced 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. ^{3}H-baclofen and ^{3}H-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.* $GABA_B$ receptor-positive modulation decreases selective molecular and behavioral effects of cocaine. *Neuropsychopharmacology* **32(2)**, 388-398 (2007).
5. 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).

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