

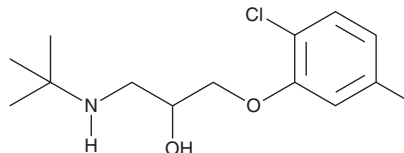
# PRODUCT INFORMATION



## Bupranolol

Item No. 34902

**CAS Registry No.:** 14556-46-8  
**Formal Name:** 1-(2-chloro-5-methylphenoxy)-3-[(1,1-dimethylethyl)amino]-2-propanol  
**Synonym:** (±)-Bupranolol  
**MF:** C<sub>14</sub>H<sub>22</sub>ClNO<sub>2</sub>  
**FW:** 271.8  
**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

Bupranolol is supplied as a solid. A stock solution may be made by dissolving the bupranolol in the solvent of choice, which should be purged with an inert gas. Bupranolol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of bupranolol in these solvents is approximately 1, 10, and 15 mg/ml, respectively.

Bupranolol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, bupranolol should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Bupranolol has a solubility of approximately 0.20 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Bupranolol is an antagonist of  $\beta$ -adrenergic receptors ( $\beta$ -ARs;  $K_i$ s = 6-15 nM for  $\beta_1$ - and  $\beta_2$ -ARs).<sup>1</sup> *In vivo*, bupranolol (10  $\mu$ mol/kg) reduces heart rate and diastolic blood pressure in pithed rats.<sup>2</sup>

### References

1. Wellstein, A., Küppers, H., Pitschner, H.F., *et al.* Transdermal delivery of bupranolol: Pharmacodynamics and beta-adrenoceptor occupancy. *Eur. J. Clin. Pharmacol.* **31**(4), 419-422 (1986).
2. Malinowska, B., Kieć-Kononowicz, K., Flau, K., *et al.* Atypical cardiostimulant  $\beta$ -adrenoceptor in the rat heart: Stereoselective antagonism by bupranolol but lack of effect by some bupranolol analogues. *Br. J. Pharmacol.* **139**(8), 1548-1554 (2003).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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