



# LKT Laboratories, Inc.

## Bupropion Hydrochloride

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### Product Information

Product ID B8363

CAS No. 31677-93-7

**Chemical Name**

Synonym Wellbutrin

Formula  $C_{13}H_{18}ClNO \cdot HCl$

Formula Wt. 276.2

Melting Point 236.0-238.0

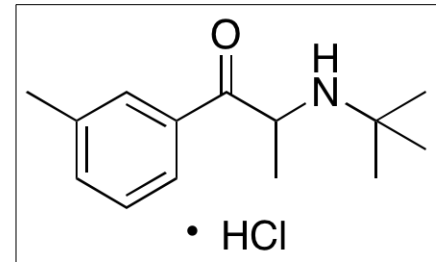
Purity  $\geq 98\%$

Solubility 50 mg/ml MeOH

Store Temp Ambient

Ship Temp Ambient

**Description** Bupropion is an antidepressant that is also commonly used as a smoking cessation aid. This compound has additional therapeutic potential, as it promotes modest weight loss, shows efficacy as an ADHD treatment, and may also be an effective treatment for neuropathic pain. Bupropion is a DA and NE reuptake inhibitor, decreasing the firing rate of NE neurons due to activation of their inhibitory somatodendritic  $\alpha_2$ -adrenoreceptors by circulating NE; bupropion's effects on NE reuptake are somewhat stronger than its effects on DA reuptake. Additionally, bupropion is a noncompetitive antagonist at  $\alpha_3B_2$ ,  $\alpha_3B_4$ ,  $\alpha_4B_2$  nicotinic acetylcholine receptors (nAChRs), decreasing the probability of channel opening in closed nAChRs and accelerating desensitization in open nAChRs.



**Bulk quantities available upon request**

Product ID	Size
B8363	50 mg
B8363	250 mg
B8363	1 g

**References** Shah TH, Moradimehr A. Bupropion for the treatment of neuropathic pain. *Am J Hosp Palliat Care*. 2010 Aug;27(5):333-6. PMID: 20185402.

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Miller DK, Sumithran SP, Dwoskin LP. Bupropion inhibits nicotine-evoked [(3)H]overflow from rat striatal slices preloaded with [(3)H]dopamine and from rat hippocampal slices preloaded with [(3)H]norepinephrine. *J Pharmacol Exp Ther*. 2002 Sep;302(3):1113-22. PMID: 12183670.

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**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.