

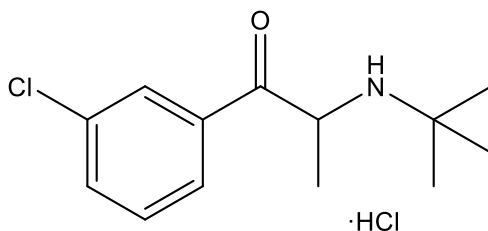
**Catalog # 10-2426**

**Bupropion HCl**

31677-93-7

1-(3-Chlorophenyl)-2-[(1,1-dimethylethyl)amino]-1-propanone hydrochloride

Lot # X102491



Clinically useful antidepressant that inhibits monoamine transporters DAT, NET, and SERT ( $K_i$ s for dopamine uptake = 2.8, 1.4, 45  $\mu$ M).<sup>1</sup> Also acts as a noncompetitive antagonist at nicotinic acetylcholine receptors (AChRs).<sup>2</sup> At higher concentrations (50  $\mu$ M), stimulates pro-inflammatory cytokines and TLR2/TLR4 and JAK2/STAT3 in human peripheral blood mononuclear cells (PBMCs).<sup>3</sup>

References/Citations:

- 1) Urra *et al.* (2014), *Presence and function of dopamine transporter (DAT) in stallion sperm: dopamine modulates sperm motility and acrosomal integrity*; PLoS One, **9** e112834
- 2) Fryer and Lukas (1999), *Noncompetitive functional inhibition at diverse, human nicotinic acetylcholine receptor subtypes by bupropion, phencyclidine, and ibogaine*; J. Pharmacol. Exp. Ther., **288** 88
- 3) Karimollah *et al.* (2021), *Revisiting bupropion anti-inflammatory action: involvement of the TLR2/TLR4 and JAK2/STAT3*; Inflammopharmacology, **29** 1101

**PHYSICAL DATA**

Molecular Weight:	276.20
Molecular Formula:	C <sub>13</sub> H <sub>18</sub> ClNO·HCl
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 40 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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