

## Product Datasheet

### Otenabant hydrochloride (orb1224244)

<b>Catalog Number</b>	orb1224244
<b>Category</b>	Small Molecules
<b>Description</b>	<p>A potent, and selective CB1 receptor antagonist with <math>K_i</math> of 0.7 nM/0.12 nM in binding and functional assays respectively; has low affinity (<math>K_i=7600</math> nM) for human CB2 receptors; reverses cannabinoid agonist mediated responses, reduces food intake, and increases energy expenditure and fat oxidation in rodents. Obesity Phase 3 Discontinued (In Vitro): Otenabant HCl has low affinity with <math>K_i</math> of 7.6 <math>\mu</math>M for human CB2 receptors. Otenabant HCl inhibits CB1 receptor with moderate unbound microsomal clearance, low hERG affinity, and adequate CNS penetration. (In Vivo): Otenabant acutely stimulates energy expenditure in rats and decreases the respiratory quotient indicating a metabolic switch to increased fat oxidation. Otenabant (10 mg/kg, p.o.) promotes a 9%, vehicle adjusted weight loss in a 10 day weight loss study in diet-induced obese mice. Otenabant HCl reverses four cannabinoid agonist mediated behaviors (locomotor activity, hypothermia, analgesia, and catalepsy) following administration of the synthetic CB1 receptor agonist CP-55940. Otenabant HCl exhibits dose-dependent anorectic activity in a model of acute food intake in rodents and increased energy expenditure and fat oxidation.</p>
<b>Target</b>	Cannabinoid Receptor
<b>Purity</b>	>98% (HPLC)
<b>MW</b>	546.8792
<b>Target Areas</b>	hCB1 hCB2 rCB1
<b>Solubility (25°C)</b>	DMSO: 1 mg/mL
<b>CAS Number</b>	686347-12-6
<b>Formula</b>	$C_{25}H_{26}Cl_3N_7O$

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<b>SMILES</b>	<chem>CCNC1(CCN(CC1)C1=NC=NC2=C1NC(N2C1=CC=C(Cl)C=C1)C1=CC=CC=C1Cl)C(N)=O</chem>
<b>Chemical Name</b>	4-Piperidinecarboxamide, 1-[8-(2-chlorophenyl)-9-(4-chlorophenyl)-9H-purin-6-yl]-4-(ethylamino)-, hydrochloride (1:1)
<b>Storage</b>	Storage temperature: -20°C. Stability: ≥ 2 years
<b>Note</b>	For research use only
<b>Expiration Date</b>	12 months from date of receipt.

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