

## Product Datasheet

### DOV 21947 hydrochloride (orb1225095)

<b>Catalog Number</b>	orb1225095
<b>Category</b>	Small Molecules
<b>Description</b>	<p>Amitifadine hydrochloride is a triple reuptake inhibitor (TRI) or serotonin-norepinephrine-dopamine reuptake inhibitor (SNDRI). Ki values for SERT/NET/DAT are 99/262/213 nM. The IC50 values for serotonin, norepinephrine and dopamine reuptake are 12/23/96 nM.(In Vitro):Amitifadine (DOV 21,947) is an antidepressant drug. Ki values for SERT, NET, and DAT are 99 nM, 262 nM, and 213 nM. The IC50 values for serotonin, norepinephrine and dopamine uptake are 12, 23 and 96 nM, respectively.(In Vivo):The 30 mg/kg Amitifadine dose significantly reduces nicotine self-administration. The 5 and 10 mg/kg doses reduce nicotine self-administration during the first 15 min. of the session when the greatest amount of nicotine is self-administered. The 30 mg/kg Amitifadine dose, but not the lower doses cause a significant reduction in locomotor activity averaged over the 1-hour session and reduce food motivated responding. The 10 mg/kg dose causes hypoactivity at the beginning of the session, but 5 mg/kg does not cause any hypoactivity. The effect of chronic Amitifadine treatment (10 mg/kg) over the course of 15 sessions is also determined. Amitifadine causes a significant reduction in nicotine self-administration, which is not seen to diminish over two consecutive weeks of treatment and a week after enforced abstinence. Amitifadine significantly reduces nicotine self-administration. This prompts further research to determine if Amitifadine might be an effective treatment for smoking cessation.</p>
<b>Target</b>	5-HT Receptor
<b>Purity</b>	>98% (HPLC)
<b>MW</b>	264.58
<b>Target Areas</b>	5-HT  Dopamine  Norepinephrine (NE)
<b>Solubility (25°C)</b>	DMSO: 10 mM

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<b>CAS Number</b>	410074-74-7
<b>Formula</b>	$C_{11}H_{12}Cl_3N$
<b>SMILES</b>	<chem>C1[C@H]2[C@@]1(CNC2)C3=CC(=C(C=C3)Cl)Cl.Cl</chem>
<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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