

# Amisulpride (hydrochloride)

Catalog No: tcsc1792



## Available Sizes

**Size:** 100mg

**Size:** 200mg

**Size:** 500mg



## Specifications

**CAS No:**

81342-13-4

**Formula:**

$C_{17}H_{28}ClN_3O_4S$

**Pathway:**

GPCR/G Protein;Neuronal Signaling

**Target:**

Dopamine Receptor;Dopamine Receptor

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

DAN 2163 hydrochloride

**Observed Molecular Weight:**

405.94

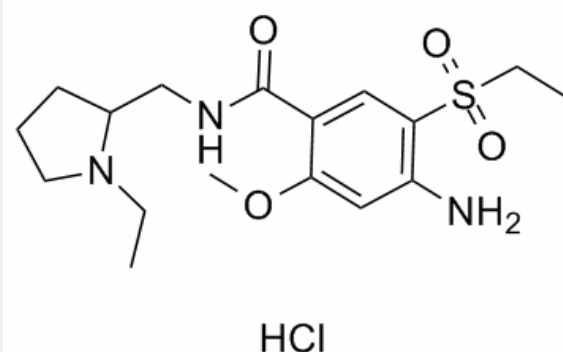
## Product Description

Amisulpride hydrochloride is a dopamine **D<sub>2</sub>/D<sub>3</sub> receptor** antagonist with **K<sub>i</sub>**s of 2.8 and 3.2 nM for human **dopamine D<sub>2</sub>** and **D<sub>3</sub>**, respectively.

IC<sub>50</sub> & Target: K<sub>i</sub>: 2.8 nM (D<sub>2</sub> receptor), 3.2 nM (D<sub>3</sub> receptor)

**In Vitro:** Amisulpride hydrochloride is an atypical dopamine D<sub>2</sub>/D<sub>3</sub> receptor antagonist with K<sub>i</sub>s of 2.8 and 3.2 nM for human dopamine D<sub>2</sub> and D<sub>3</sub>, respectively. Amisulpride hydrochloride (100 nM) inhibits quinpirole-elicited [<sup>3</sup>H]thymidine incorporation with an IC<sub>50</sub> value of 22±3 nM (n=3). Amisulpride hydrochloride slightly but significantly increases [<sup>3</sup>H]dopamine release from slices of the rat striatum (S<sub>2</sub>/S<sub>1</sub>=0.88±0.04 under control conditions, n=6; 1.04±0.08 in the presence of 100 nM Amisulpride hydrochloride, n=4; P[1]).

**In Vivo:** Only the highest dose of Amisulpride hydrochloride (100 mg/kg) significantly reduces dopamine levels in the striatum or limbic system. Amisulpride hydrochloride significantly increases the synthesis of dopamine in the rat striatum and limbic system at doses of 20 and 100 mg/kg. Amisulpride hydrochloride (0.5 to 75 mg/kg) fails to provoke an additional increase in dopa accumulation in the striatum but slightly accelerates, at 75 mg/kg, dopamine synthesis in the limbic system. In comparison with vehicle-treated controls, Amisulpride hydrochloride (10 mg/kg) increases extracellular dopamine levels. The administration of Amisulpride hydrochloride (0.5 to 15 mg/kg s.c.) provokes a time- and dose-dependent increase in the stimulation-evoked dopamine release. Amisulpride hydrochloride decreases striatal ACh levels significantly at 30 and 100 mg/kg (87.5% and 56.3% of control levels, respectively)<sup>[1]</sup>. In both acute study, Amisulpride hydrochloride (70 mg/kg, p.o.) significantly increases the duration of swimming behavior [F(3,28)=45.90, p[2].



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