
Product Data Sheet

Product Name: Talnetant hydrochloride

Cat. No.: GC37730

Chemical Properties

Cas. No. 204519-66-4

SMILES OC1=C(C(N[C@H](C2=CC=CC=C2)CC)=O)C3=C(N=C1C4=CC=CC=C4)C=CC=C3.[H]Cl

Formula	C ₂₅ H ₂₃ ClN ₂ O ₂	M.Wt	418.92
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Solubility	Soluble in DMSO	Storage	Store at -20°C
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General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

Talnetant is an antagonist of the neurokinin-3 (NK₃) receptor ($K_i = 1$ nM).¹ It is selective for NK₃ over NK₁ and NK₂ receptors (K_i s = 144 and >100,000 nM, respectively, in CHO cells expressing recombinant human receptors). Talnetant inhibits calcium mobilization induced by neurokinin B in HEK293 cells expressing human NK₃ receptors ($IC_{50} = 16.6$ nM). It inhibits contractions induced by the NK₃ receptor agonist senktide in isolated rabbit iris sphincter muscle ($pD_2 = 9.1$). Talnetant (5-20 mg/kg) reduces senktide-induced head shakes and tail whips in mice. It also inhibits senktide-induced wet-dog shakes, increases extracellular dopamine and norepinephrine in the medial prefrontal cortex, and attenuates haloperidol-induced increases in nucleus accumbens dopamine levels in guinea pigs.²

1. Sarau, H.M., Griswold, D.E., Potts, W., et al. Nonpeptide tachykinin receptor antagonists: I. Pharmacological and pharmacokinetic characterization of SB 223412, a novel, potent and selective neurokinin-3 receptor antagonist. *J. Pharmacol. Exp.*

Caution: Product has not been fully validated for medical applications. For research use only.

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Ther.281(3)1303-1311(1997) 2.Dawson, L.A., Cato, K.J., Scott, C., et al.In vitro and in vivo characterization of the non-peptide NK3 receptor antagonist SB-223412 (talnetant): Potential therapeutic utility in the treatment of schizophreniaNeuropsychopharmacology33(7)1642-1652(2008)

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