

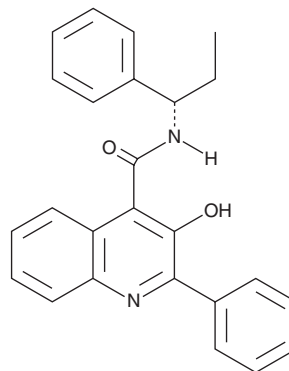
# PRODUCT INFORMATION



## Talnetant

Item No. 29699

**CAS Registry No.:** 174636-32-9  
**Formal Name:** 3-hydroxy-2-phenyl-N-[(1S)-1-phenylpropyl]-4-quinolinecarboxamide  
**Synonym:** SB-223412  
**MF:** C<sub>25</sub>H<sub>22</sub>N<sub>2</sub>O<sub>2</sub>  
**FW:** 382.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 230, 252 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Talnetant is supplied as a crystalline solid. A stock solution may be made by dissolving the talnetant in the solvent of choice, which should be purged with an inert gas. Talnetant is soluble in the organic solvent DMSO at a concentration of approximately 25 mg/ml.

### Description

Talnetant is an antagonist of the neurokinin-3 (NK<sub>3</sub>) receptor (K<sub>i</sub> = 1 nM).<sup>1</sup> It is selective for NK<sub>3</sub> over NK<sub>1</sub> and NK<sub>2</sub> receptors (K<sub>i</sub>s = 144 and >100,000 nM, respectively, in CHO cells expressing recombinant human receptors). Talnetant inhibits calcium mobilization induced by neurokinin B (Item No. 24542) in HEK293 cells expressing human NK<sub>3</sub> receptors (IC<sub>50</sub> = 16.6 nM). It inhibits contractions induced by the NK<sub>3</sub> receptor agonist senktide (Item No. 16721) in isolated rabbit iris sphincter muscle (pD<sub>2</sub> = 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.<sup>2</sup>

### References

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. 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 NK<sub>3</sub> receptor antagonist SB-223412 (talnetant): Potential therapeutic utility in the treatment of schizophrenia. *Neuropsychopharmacology* **33**(7), 1642-1652 (2008).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/09/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM