

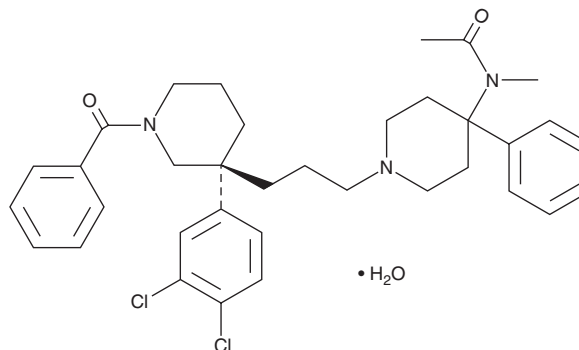
# PRODUCT INFORMATION



## Osanetant (hydrate)

Item No. 33417

**Formal Name:** N-[1-[3-[(3R)-1-benzoyl-3-(3,4-dichlorophenyl)-3-piperidinyl]propyl]-4-phenyl-4-piperidinyl]-N-methyl-acetamide, monohydrate  
**Synonym:** SR 142801  
**MF:**  $C_{35}H_{41}Cl_2N_3O_2 \cdot H_2O$   
**FW:** 624.7  
**Purity:**  $\geq 98\%$   
**Supplied as:** A solid  
**Storage:**  $-20^\circ C$   
**Stability:**  $\geq 4$  years



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

### Laboratory Procedures

Osanetant (hydrate) is supplied as a solid. A stock solution may be made by dissolving the osanetant (hydrate) in the solvent of choice, which should be purged with an inert gas. Osanetant (hydrate) is soluble in the organic solvent DMSO at a concentration of approximately 15 mg/ml.

### Description

Osanetant is a neurokinin-3 (NK<sub>3</sub>) receptor antagonist ( $K_i = 0.21$  nM in CHO cells expressing the human receptor).<sup>1</sup> It is selective for NK<sub>3</sub> over NK<sub>1</sub> and NK<sub>2</sub> receptors ( $K_i$ s =  $>100$  and  $0.02$   $\mu M$ , respectively).<sup>2</sup> Osanetant inhibits contractions and acetylcholine release induced by neurokinin B (Item No. 24542) in isolated guinea pig ileal strips in a concentration-dependent manner.<sup>1</sup> It inhibits ovalbumin-induced increases in bronchoalveolar lavage fluid (BALF) neutrophil, eosinophil, and lymphocyte infiltration in an ovalbumin-sensitized mouse model of allergic asthma.<sup>3</sup> Osanetant (5 and 10 mg/kg) increases the duration of social interaction, as well as reduces immobility time in the tonic immobility test, indicating anxiolytic-like and antidepressant-like activities, respectively, in gerbils.<sup>4</sup>

### References

1. Emonds-Alt, X., Bichon, D., Ducoux, J.P., *et al.* SR 142801, the first potent non-peptide antagonist of the tachykinin NK<sub>3</sub> receptor. *Life Sci.* **56**(1), PL27-PL32 (1995).
2. Griebel, G. and Beeské, S. Is there still a future for neurokinin 3 receptor antagonists as potential drugs for the treatment of psychiatric diseases? *Pharmacol. Ther.* **133**(1), 116-123 (2012).
3. Nénan, S., Germain, N., Lagente, V., *et al.* Inhibition of inflammatory cell recruitment by the tachykinin NK<sub>3</sub>-receptor antagonist, SR 142801, in a murine model of asthma. *Eur. J. Pharmacol.* **421**(3), 201-205 (2001).
4. Salomé, N., Stemmelin, J., Cohen, C., *et al.* Selective blockade of NK2 or NK3 receptors produces anxiolytic- and antidepressant-like effects in gerbils. *Pharmacol. Biochem. Behav.* **83**(4), 533-539 (2006).

#### 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.

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