Screening Libraries

Product Data Sheet

SDZ NKT 343

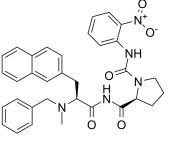
Cat. No.: HY-108480 CAS No.: 180046-99-5 Molecular Formula: $C_{33}H_{33}N_5O_5$ Molecular Weight: 579.65

Target: Neurokinin Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.



BIOLOGICAL ACTIVITY

Description	SDZ NKT 343 is a selective, orally active NK $_1$ receptor antagonist with an IC $_{50}$ of 0.62 nM against human NK $_1$ receptor. SDZ NKT 343 has good analgesic activity ^{[1][2]} .		
IC ₅₀ & Target	hNK1 0.62 nM (IC ₅₀)	hNK2 0.52 μM (Ki)	hNK3 3.4 μM (Ki)
In Vitro	SDZ NKT 343 shows a markedly lower affinity at rat NK $_1$ receptors in whole forebrain membranes (IC $_{50}$ =451+139 nM) $^{[1]}$. SDZ NKT 343 shows weak affinity to human NK $_2$ and NK $_3$ receptors in transfected Cos-7 cells (K $_i$ of 0.52+0.04 μ M and 3.4+1.2 μ M respectively) $^{[1]}$. MCE has not independently confirmed the accuracy of these methods. They are for reference only.		
In Vivo	SDZ NKT 343 antagonized [Sar ⁹]SP sulphone-evoked bronchoconstriction (70% reduction at 0.4 mg/kg, i.v.) in anaesthetized guinea-pigs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		

REFERENCES

[1]. Walpole CS, et al. Comparative, general pharmacology of SDZ NKT 343, a novel, selective NK1 receptor antagonist. Br J Pharmacol. 1998 May;124(1):83-92.

[2]. Walpole C, et al. 2-Nitrophenylcarbamoyl-(S)-prolyl-(S)-3-(2-naphthyl)alanyl-N-benzyl-N - methylamide (SDZ NKT 343), a potent human NK1 tachykinin receptor antagonist with good oral analgesic activity in chronic pain models. J Med Chem. 1998 Aug 13;41(17):3159-73.

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

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