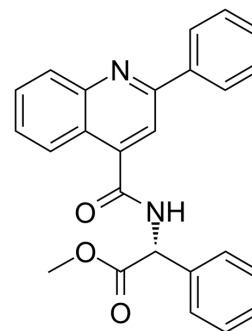


## SB 218795

<b>Cat. No.:</b>	HY-107692		
<b>CAS No.:</b>	174635-53-1		
<b>Molecular Formula:</b>	C <sub>25</sub> H <sub>20</sub> N <sub>2</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	396.44		
<b>Target:</b>	Neurokinin Receptor		
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 250 mg/mL (630.61 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.5224 mL	12.6122 mL	25.2245 mL
5 mM	0.5045 mL	2.5224 mL	5.0449 mL
10 mM	0.2522 mL	1.2612 mL	2.5224 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

SB 218795 is a potent and selective non-peptide NK3 receptor antagonist, with a K<sub>i</sub> 13 nM for hNK3. SB 218795 shows about 90-fold and 7000-fold selectivity for hNK3 over hNK2 and hNK1, respectively. SB 218795 can inhibit NK3 receptor-mediated pupillary constriction of the rabbit<sup>[1][2]</sup>.

#### IC<sub>50</sub> & Target

hNK3 13 nM (K <sub>i</sub> )	hNK2 1220 nM (K <sub>i</sub> )
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#### In Vitro

SB 218795 (3-30 nM) antagonizes the contractile responses induced by the NK3 receptor agonist senktide in a surmountable and concentration-dependent manner<sup>[2]</sup>.

SB 218795 (0.3-3 μM) does not affect the contractile responses of the NK3 receptor agonist [MePhe7]-NKB in the rabbit iris sphincter muscle<sup>[2]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### In Vivo

SB 218795 (0.25-1 mg/kg; i.v.) inhibits Senktide-induced miosis in rabbits by the maximum inhibition of 78%<sup>[2]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

- [1]. Giardina GA, et, al. Discovery of a novel class of selective non-peptide antagonists for the human neurokinin-3 receptor. 1. Identification of the 4-quinolinecarboxamide framework. *J Med Chem.* 1997 Jun 6;40(12):1794-807.
- [2]. Medhurst AD, et, al. In vitro and in vivo characterization of NK3 receptors in the rabbit eye by use of selective non-peptide NK3 receptor antagonists. *Br J Pharmacol.* 1997 Oct;122(3):469-76.
- [3]. Valero MS, et, al. Contractile effect of tachykinins on rabbit small intestine. *Acta Pharmacol Sin.* 2011 Apr;32(4):487-94.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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