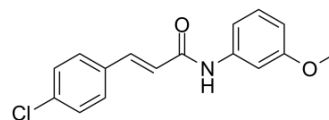


## SB-366791

<b>Cat. No.:</b>	HY-12245		
<b>CAS No.:</b>	472981-92-3		
<b>Molecular Formula:</b>	C <sub>16</sub> H <sub>14</sub> ClNO <sub>2</sub>		
<b>Molecular Weight:</b>	287.74		
<b>Target:</b>	TRP Channel		
<b>Pathway:</b>	Membrane Transporter/Ion Channel; 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 : ≥ 39 mg/mL (135.54 mM)  
 H<sub>2</sub>O : < 0.1 mg/mL (insoluble)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1 mg	5 mg	10 mg
	1 mM		3.4754 mL	17.3768 mL	34.7536 mL
	5 mM		0.6951 mL	3.4754 mL	6.9507 mL
	10 mM		0.3475 mL	1.7377 mL	3.4754 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (8.69 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: 2.5 mg/mL (8.69 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (8.69 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

SB-366791 is a potent, competitive and selective vanilloid receptor (VR1/TRPV1) antagonist with IC<sub>50</sub> of 5.7±1.2 nM target: VR1/TRPV1 IC<sub>50</sub>: 5.7±1.2 nM [1] SB-366791 produced a concentration-dependent inhibition of the response to capsaicin with an apparent pK<sub>b</sub> of 7.74±0.08. Schild analysis indicated a competitive mechanism of action with a pA<sub>2</sub> of 7.71.[1] SB-366791 showed a concentration-dependent potentiation of pH 5-induced 45Ca<sup>2+</sup> uptake in CHO cells expressing rat TRPV1 but not in untransfected cells[2]

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## CUSTOMER VALIDATION

- Sci Signal. 2020 Nov 24;13(659):eaax0273.

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## REFERENCES

[1]. M.J. Gunthorpe et al. Identification and characterisation of SB-366791, a potent and selective vanilloid receptor (VR1/TRPV1) antagonist. *Neuropharmacology*, 2004 Jan, 46(1):133-49.

[2]. Gava NR et al. Proton Activation Does Not Alter Antagonist Interaction with the Capsaicin-Binding Pocket of TRPV1. *Mol Pharmacol*, 2005 Dec, 68(6), 1524-33.

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

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