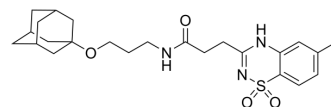


BTD

Cat. No.:	HY-128205		
CAS No.:	896684-04-1		
Molecular Formula:	C ₂₄ H ₃₃ N ₃ O ₄ S		
Molecular Weight:	459.6		
Target:	TRP Channel		
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (217.58 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
Preparing Stock Solutions	1 mM	2.1758 mL	10.8790 mL	21.7581 mL
	5 mM	0.4352 mL	2.1758 mL	4.3516 mL
	10 mM	0.2176 mL	1.0879 mL	2.1758 mL
Please refer to the solubility information to select the appropriate solvent.				
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.44 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.44 mM); Clear solution 			

BIOLOGICAL ACTIVITY

Description	BTD is a selective transient receptor potential canonical 5 (TRPC5) activator. BTD can be used for the research of neurological disease ^[1] .
IC₅₀ & Target	EC ₅₀ : 1.4 μM (fluorometric microwell Ca ²⁺ influx analyses); 1.3 μM (in whole cell patch clamp experiments); 20.6 μM (TRPM8-expressing HEK293 cells) ^[1] .
In Vitro	<p>BTD can activate TRPC5 with an EC₅₀ values of 1.4 μM (fluorometric microwell Ca²⁺ influx analyses) and 1.3 μM (in whole cell patch clamp experiments), respectively^[1].</p> <p>BTD can activate TRPM8-expressing HEK293 cells with an EC₅₀ values of 20.6 μM^[1].</p> <p>BTD can activate heteromeric channel complexes consisting of TRPC5 and its closest relatives TRPC1 or TRPC4^[1]</p>

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

REFERENCES

[1]. Beckmann H, et al. A benzothiadiazine derivative and methylprednisolone are novel and selective activators of transient receptor potential canonical 5 (TRPC5) channels. Cell Calcium. 2017;66:10-18.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA