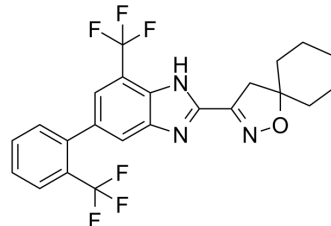


TC-I 2014

Cat. No.:	HY-110199		
CAS No.:	1221349-53-6		
Molecular Formula:	C ₂₃ H ₁₉ F ₆ N ₃ O		
Molecular Weight:	467.41		
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 : 250 mg/mL (534.86 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.1394 mL	10.6972 mL	21.3945 mL
5 mM	0.4279 mL	2.1394 mL	4.2789 mL
10 mM	0.2139 mL	1.0697 mL	2.1394 mL

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

BIOLOGICAL ACTIVITY

Description

TC-I 2014 (compound 5) is a potent and orally active Benzimidazole-containing transient receptor potential melastatin 8 (TRPM8) antagonist, with IC₅₀ values of 0.8 nM, 3.0 nM and 4.4 nM for canine, human and rat channels respectively. TC-I 2014 exhibits antiallodynic properties in pain models^[1].

IC₅₀ & Target

TRPM8^[1].

In Vitro

TC-I 2014 (compound 5) potently inhibits cold-induced TRPM8 currents in HEK293 cells stably expressing canine or human TRPM8, with IC₅₀ values of 0.413 and 1 nM, respectively^[1].

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

In Vivo

TC-I 2014 (10 mg/kg, Orally once) completely prevents icilin-induced WDS^[1].

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

Animal Model:	TC-I 2014 (10 mg/kg, Orally once) completely prevents icilin-induced WDS ^[1] .
---------------	---

Dosage:	3, 5.6, 10 mg/kg.
Administration:	Orally once.
Result:	Produced greater than 90% inhibition at 3, 5.6, and 10 mg/kg administered 2 h prior to icilin challenge.

REFERENCES

[1]. Parks DJ, et Design and optimization of benzimidazole-containing transient receptor potential melastatin 8 (TRPM8) antagonists. J Med Chem. 2011 Jan 13;54(1):233-47.

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