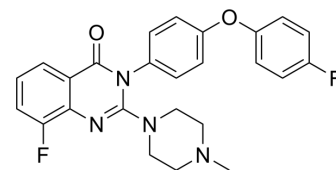


TRPV4 agonist-1 free base

Cat. No.:	HY-114400	
CAS No.:	2314467-59-7	
Molecular Formula:	C ₂₅ H ₂₂ F ₂ N ₄ O ₂	
Molecular Weight:	448.46	
Target:	TRP Channel	
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling	
Storage:	Powder	-20°C 3 years
	In solvent	-80°C 6 months
		-20°C 1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 83.33 mg/mL (185.81 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	2.2299 mL	11.1493 mL	22.2985 mL
				5 mM	0.4460 mL	2.2299 mL	4.4597 mL
				10 mM	0.2230 mL	1.1149 mL	2.2299 mL
Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.64 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description	TRPV4 agonist-1 free base is a transient receptor potential vanilloid 4 (TRPV4) agonist with an EC ₅₀ of 60 nM in the hTRPV4 Ca ²⁺ assay ^[1] .
IC ₅₀ & Target	EC ₅₀ : 60 nM (hTRPV4 hTRPV4 Ca ²⁺) ^[1]
In Vitro	TRPV4 agonist-1 (Compound 36) exhibits significantly increased potency (EC _{max} : 20 nM in the SOX9 reporter assay). TRPV4 agonist-1 is inactive against TRPV1 channels ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Atobe M, et al. Discovery of Novel Transient Receptor Potential Vanilloid 4 (TRPV4) Agonists as Regulators of Chondrogenic Differentiation: Identification of Quinazolin-4(3 H)-ones and in Vivo Studies on a Surgically Induced Rat Model of Osteoarthritis. J Med Chem. 2019 Jan 28.

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