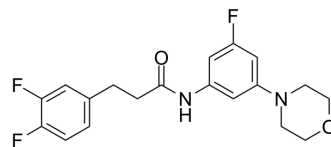


SAE-14

Cat. No.:	HY-147222		
CAS No.:	1241280-25-0		
Molecular Formula:	C ₁₉ H ₁₉ F ₃ N ₂ O ₂		
Molecular Weight:	364.36		
Target:	EBI2/GPR183		
Pathway:	GPCR/G Protein		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (274.45 mM; ultrasonic and warming and heat to 60°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.7445 mL	13.7227 mL	27.4454 mL
5 mM	0.5489 mL	2.7445 mL	5.4891 mL
10 mM	0.2745 mL	1.3723 mL	2.7445 mL

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

BIOLOGICAL ACTIVITY

Description

SAE-14 (compound SAE-14) is a potent, specific GPR183 antagonist with an IC₅₀ value of 28.5 nM, can antagonize 7α, 25-OHC-induced calcium mobilization with IC₅₀ value below 50 nM in HL-60 cells. GPR183 antagonist-1 can reverse allodynia in mice^[1].

IC₅₀ & Target

IC₅₀: 28.5 nM (GPR183)^[1]

In Vitro

SAE-14 (compound SAE-14) can able to antagonize 7α, 25-OHC-induced calcium mobilization with an IC₅₀ value below 50 nM^[1].

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

Cell Viability Assay^[1]

Cell Line: The human leukemia (HL)-60 cells

Concentration: 5×of the antagonist

Incubation Time: 15 min

	Result:	Had GPR183-specific (IC ₅₀ : 28.5nM) and abolished 7a, 25-OHC-induced calcium mobilization in the HL-60 cells.
In Vivo	SAE-14 (compound SAE-14) (i.th.; 2.9 μM; once) can reverse nerve injury-induced allodynia in mice ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Male and female ICR mice ^[1]
	Dosage:	2.9 μM
	Administration:	intrathecal (i.th.) injections; 2.9 μM; once
	Result:	Reversed CCI-induced mechanical allodynia in a time-dependent manner.

REFERENCES

[1]. Kathryn Braden, et al. GPR183-Oxysterol Axis in Spinal Cord Contributes to Neuropathic Pain. J Pharmacol Exp Ther. 2020 Nov;375(2):367-375.

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

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