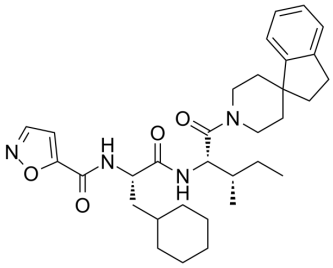
GB83

Cat. No.:	HY-124061
CAS No.:	1252806-86-2
Molecular Formula:	$C_{32}H_{44}N_4O_4$
Molecular Weight:	548.72
Target:	Protease Activated Receptor (PAR)
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	GB83 is a potent PAR2 antagonist. GB83 reverses neutrophil elastase‐induced synovitis and pain. GB83 blocks the effect of MET-1 supernatant on NG neurons[1].
IC_{50} & Target	PAR2
In Vitro	GB83 (10 μM) blocks the effect of MET-1 (microbial ecosystem therapeutic-1) supernatant on nodose ganglion (NG) neurons [2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	GB83 (5 μg; i.p.) reverses neutrophil elastase‐induced synovitis and pain in PAR2 KO mice[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	8-14 weeks, 20-30 g male C57Bl/6 mice (PAR2 KO mice)[1]
Dosage:	5 μg
Administration:	I.p.; 3 times at 10 min before and 110 and 230 min after neutrophil elastase administered
Result:	Significantly blocked the neutrophil elastase induced increase in vascular perfusion, as well as the number of rolling adherent leukocytes, and also significantly attenuated hindpaw allodynia.

REFERENCES

[1]. Muley MM, et al. Neutrophil elastase induces inflammation and pain in mouse knee joints via activation of proteinase-activated receptor-2. Br J Pharmacol. 2016 Feb;173(4):766-77.

[2]. Pradhananga S, et al. Protease-dependent excitation of nodose ganglion neurons by commensal gut bacteria. J Physiol. 2020 Jun;598(11):2137-2151.

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