SLIGRL-NH2

Cat. No.: HY-P1308

CAS No.: 171436-38-7

Molecular Formula: $C_{29}H_{56}N_{10}O_7$

Molecular Weight: 656.82

Sequence: Ser-Leu-Ile-Gly-Arg-Leu-NH2

Sequence Shortening: SLIGRL-NH2

Target: Protease Activated Receptor (PAR)

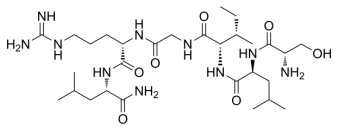
Pathway: GPCR/G Protein

Storage: Sealed storage, away from moisture

Powder -80°C 2 years

-20°C 1 year

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H_2O : 110 mg/mL (167.47 mM; Need ultrasonic)

DMSO : 100 mg/mL (152.25 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.5225 mL	7.6124 mL	15.2249 mL
	5 mM	0.3045 mL	1.5225 mL	3.0450 mL
	10 mM	0.1522 mL	0.7612 mL	1.5225 mL

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

In Vivo

1. Add each solvent one by one: PBS
   Solubility: 100 mg/mL (152.25 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (3.81 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (3.81 mM); Clear solution
4. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (3.81 mM); Clear solution

BIOLOGICAL ACTIVITY

Description SLIGRL-NH2 (Protease-Activated Receptor-2 Activating Peptide) is an agonist of Protease-Activated Receptor-2 (PAR-2)[1].

IC_{50} & Target	PAR2
In Vitro	SLIGRL-NH2 is an agonist of PAR-2 and MrgprC11[1]. SLIGRL-NH2 causes an L-NAME-inhibited relaxation. Based on SLIGRL-NH_2 causing a concentration-dependent relaxation with an EC_{50} of 10 μM in endothelium-free preparations in the presence of perivascular adipose tissue (PVAT) , 20 μM is used as a suitable 'test' concentration of peptide in subsequent experiments designed to evaluate the effects of potential inhibitors of ADRF release/action. In the endothelium-free aorta preparations, SLIGRL-NH2 causes a concentration-dependent relaxation in preparations only in the presence of PVAT [+PVAT, -ENDO (endothelium)][2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Akiyama T, et al. Behavioral model of itch, alloknesis, pain and allodynia in the lower hindlimb and correlativeresponses of lumbar dorsal horn neurons in the mouse. Neuroscience. 2014 Apr 25;266:38-46.

[2]. Li Y, et al. Perivascular adipose tissue-derived relaxing factors: release by peptide agonists via proteinase-activated receptor-2 (PAR2) and non-PAR2 mechanisms. Br J Pharmacol. 2011 Dec;164(8):1990-2002.

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