ELA-11(human)

CMPLHSRVPFP

Cat. No.: HY-P2197

CAS No.: 1784687-32-6

Molecular Formula: $C_{58}H_{90}N_{16}O_{13}S_2$

Molecular Weight: 1283.56

Sequence: Cys-Met-Pro-Leu-His-Ser-Arg-Val-Pro-Phe-Pro

Sequence Shortening: CMPLHSRVPFP

Target: Apelin Receptor (APJ); Arrestin

Pathway: GPCR/G Protein

Storage: Sealed storage, away from moisture and light, under nitrogen
Powder -80°C 2 years
-20°C 1 year
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light, under nitrogen)

SOLVENT & SOLUBILITY

In Vitro

H_2O : 100 mg/mL (77.91 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	0.7791 mL	3.8954 mL	7.7908 mL
5 mM	0.1558 mL	0.7791 mL	1.5582 mL
10 mM	0.0779 mL	0.3895 mL	0.7791 mL

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

BIOLOGICAL ACTIVITY

Description

ELA-11(human), a peptide, is a full agonist of human apelin receptor, with a pK_i of 7.85. ELA-11(human) completely inhibits Forskolin-induced cAMP production and stimulates β-arrestin recruitment[1].

IC_{50} & Target

pKi: 7.85 (apelin receptor)[1]

In Vitro

ELA-11(human) (1 pM-100 nM) completely inhibits Forskolin-induced cAMP production in a concentration-dependent manner[1].
ELA-11(human) (1 pM-1 μM) stimulates β-arrestin recruitment in a concentration-dependent manner with subnanomolar potencies[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Yang P, et, al. Elabela/Toddler Is an Endogenous Agonist of the Apelin APJ Receptor in the Adult Cardiovascular System, and Exogenous Administration of the Peptide Compensates for the Downregulation of Its Expression in Pulmonary Arterial Hypertension. Circulation. 2017 Mar 21;135(12):1160-1173.

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

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