

## Apelin-12

Cat. No.:	HY-P2537
CAS No.:	229961-08-4
Molecular Formula:	C <sub>64</sub> H <sub>103</sub> N <sub>21</sub> O <sub>14</sub> S
Molecular Weight:	1422.7
Sequence Shortening:	RPRLSHKGPMPPF
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

### BIOLOGICAL ACTIVITY

<b>Description</b>	Apelin-12 is one of the most potent C-terminal fragments of the polypeptide that possesses a high affinity to orphan receptor APJ receptor. Apelin-12 is involved in the regulation of body fluid homeostasis and in the central control of feeding. Apelin-12 blocks HIV-1 entry through APJ receptor. Apelin-12 exerts neuroprotective effect <sup>[1][2][3]</sup> .
<b>In Vitro</b>	Apelin-12 (A12) exerts neuroprotective effect against ischemia-reperfusion injury by inhibiting JNK and p38 MAPK signaling pathway in mouse <sup>[1]</sup> . Administration of exogenous A12 reduces arterial blood pressure in anesthetized rats due to activation of endothelial nitric oxide synthase and exerts a positive inotropic action in failing myocardium of rodents <sup>[2]</sup> . Apelin-12 stimulates acid secretion through an increase of histamine release in rat stomachs <sup>[4]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. Pisarenko OI, et al. Effects of structural analogues of apelin-12 in acute myocardial infarction in rats. *J Pharmacol Pharmacother.* 2013;4(3):198-203.
- [2]. Pisarenko OI, et al. Apelin-12 and its structural analog enhance antioxidant defense in experimental myocardial ischemia and reperfusion. *Mol Cell Biochem.* 2014;391(1-2):241-250.
- [3]. Liu DR, et al. Apelin-12 exerts neuroprotective effect against ischemia-reperfusion injury by inhibiting JNK and P38MAPK signaling pathway in mouse. *Eur Rev Med Pharmacol Sci.* 2018;22(12):3888-3895. Liu DR, et al. Apelin-12 exerts neuroprotective effect against ischemia-reperfusion injury by inhibiting JNK and P38MAPK signaling pathway in mouse. *Eur Rev Med Pharmacol Sci.* 2018;22(12):3888-3895.
- [4]. Ohno S, et al. Apelin-12 stimulates acid secretion through an increase of histamine release in rat stomachs. *Regul Pept.* 2012;174(1-3):71-78.

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

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