

## PEN (human)

Cat. No.:	HY-P2278
CAS No.:	597578-70-6
Molecular Formula:	C <sub>97</sub> H <sub>159</sub> N <sub>27</sub> O <sub>32</sub>
Molecular Weight:	2215.46
Sequence Shortening:	AADHDVGSSELPPEGVLGALLRV
Target:	G protein-coupled Bile Acid Receptor 1
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)

### BIOLOGICAL ACTIVITY

Description	PEN (human), one of the most abundant hypothalamic neuropeptide and derived from the proprotein ProSAAS, is an endogenous ligand of GPR83 <sup>[1]</sup> .
In Vitro	Mouse PEN (mPEN) and rat PEN (rPEN) only differ by one residue at the N-terminal end, whereas human PEN (hPEN) is more divergent and has the sequence PEG instead of PEN <sup>[2]</sup> . PEN binds and activates a GPCR in the brain <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### CUSTOMER VALIDATION

- FEBS J. 2023 Feb 28.

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### REFERENCES

- [1]. Seshat M Mack, et al. Neuropeptide PEN and Its Receptor GPR83: Distribution, Signaling, and Regulation. ACS Chem Neurosci. 2019 Apr 17;10(4):1884-1891.
- [2]. Ivone Gomes, et al. Identification of GPR83 as the receptor for the neuroendocrine peptide PEN. Sci Signal. 2016 Apr 26;9(425):ra43.

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

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