

PACAP (1-38) free acid TFA

Cat. No.:	HY-P0221B
Molecular Formula:	C ₂₀₅ H ₃₃₁ F ₃ N ₆₂ O ₅₆ S
Molecular Weight:	4649.26
Sequence:	His-Ser-Asp-Gly-Ile-Phe-Thr-Asp-Ser-Tyr-Ser-Arg-Tyr-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Ala-Ala-Val-Leu-Gly-Lys-Arg-Tyr-Lys-Gln-Arg-Val-Lys-Asn-Lys
Sequence Shortening:	HSDGIFTDSYSRYRKQMAVKKYLA AVLGKR YKQRVKNK
Target:	PACAP Receptor
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	PACAP (1-38) free acid TFA is an endogenous neuropeptide. PACAP (1-38) free acid TFA potently stimulates antral motility and somatostatin secretion, inhibits the secretion of gastrin and stimulates the release of vasoactive intestinal polypeptide, gastrin releasing peptide and substance P. PACAP (1-38) free acid TFA also enhances N-methyl-D-aspartate receptor function and expression of brain-derived neurotrophic factor through RACK1 ^{[1][2]} .								
In Vitro	<p>PACAP (1-38) free acid TFA (1 nM) increases substance P, gastrin releasing peptide and vasoactive intestinal polypeptide release^[1].</p> <p>PACAP (1-38) free acid TFA (100 nM; 10 min) induces tyrosine phosphorylation of NR2B in rat hippocampal slices^[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis^[2]</p> <table> <tr> <td>Cell Line:</td><td>Rat hippocampal slices</td></tr> <tr> <td>Concentration:</td><td>100 nM</td></tr> <tr> <td>Incubation Time:</td><td>10 min</td></tr> <tr> <td>Result:</td><td>Caused an enhancement of tyrosine phosphorylation of NR2B.</td></tr> </table>	Cell Line:	Rat hippocampal slices	Concentration:	100 nM	Incubation Time:	10 min	Result:	Caused an enhancement of tyrosine phosphorylation of NR2B.
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REFERENCES

[1]. Tornøe K, et al. PACAP 1-38 as neurotransmitter in the porcine antrum. Regul Pept. 2001 Sep 15;101(1-3):109-21.

[2]. Yaka R, et al. Pituitary adenylate cyclase-activating polypeptide (PACAP(1-38)) enhances N-methyl-D-aspartate receptor function and brain-derived neurotrophic factor expression via RACK1. J Biol Chem. 2003 Mar 14;278(11):9630-8.

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

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