



**LKT Laboratories, Inc.**

**Pituitary Adenylate Cyclase-activating Polypeptide (6-27),  
human, sheep, rat**

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## Product Information

**Product ID** P0007

**CAS No.** 136134-68-4

**Chemical Name**

**Synonym** PACAP (6-27)

**Formula** C<sub>121</sub>H<sub>193</sub>N<sub>33</sub>O<sub>31</sub>S

**Formula Wt.** 2638.1

**Melting Point**

**Purity** ≥95%

**Solubility**

**Store Temp** -20° C

**Ship Temp** Ambient

**Description** Pituitary adenylate cyclase-activating polypeptide (PACAP) is an endogenous peptide that stimulates cAMP production in the anterior pituitary. PACAP and PACAP-related peptide (PRP) regulate immune function and display increases in expression when hosts are challenged with bacterial pathogens. PACAP and PRP also control expression of reproductive hormones such as follicle-stimulating hormone (FSH) and luteinizing hormone (LH). Additionally, PACAP and PRP bind the PAC1 receptor and VPAC1/2 receptors. PACAP itself inhibits K<sup>+</sup> amplitude of delayed rectifier K<sup>+</sup> channels, exhibiting anti-apoptotic activity in cerebellar granule cells.

H-Phe-Thr-Asp-Ser-Tyr-Ser-Arg-Tyr-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Ala-Ala-Val-Leu-NH<sub>2</sub>

## Pricing and Availability

*Bulk quantities available upon request*

Product ID	Size	List Price
P0007	0.5 mg	\$214.30
P0007	1 mg	\$365.40
P0007	2.5 mg	\$643.00

**References** Nam BH, Moon JY, Kim YO, et al. Structural and functional characterization of pituitary adenyl cyclase-activating polypeptide (PACAP)/PACAP-related peptide (PRP) and its receptor in olive flounder (*Paralichthys olivaceus*). *Comp Biochem Physiol B Biochem Mol Biol.* 2013 Jan;164(1):18-28. PMID: 23026070.

Tam JK, Lee LT, Cheng CH, et al. Discovery of a new reproductive hormone in teleosts: pituitary adenylate cyclase-activating polypeptide-related peptide (PRP). *Gen Comp Endocrinol.* 2011 Sep 15;173(3):405-10. PMID: 21703272.

Vaudry D, Falluel-Morel A, Bourgault S, et al. Pituitary adenylate cyclase-activating polypeptide and its receptors: 20 years after the discovery. *Pharmacol Rev.* 2009 Sep;61(3):283-357. PMID: 19805477.

Mei YA, Vaudry D, Basille M, et al. PACAP inhibits delayed rectifier potassium current via a cAMP/PKA transduction pathway: evidence for the involvement of I<sub>k</sub> in the anti-apoptotic action of PACAP. *Eur J Neurosci.* 2004 Mar;19(6):1446-58. PMID: 15066141.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.