# PRODUCT INFORMATION 

## PACAP (6-38)(human, chicken, mouse, ovine, porcine, rat)(trifluoroacetate salt)

Item No. 24554

| Formal Name: | L-phenylalanyl-L-threonyl-L-a-aspartyl-L-seryl-L-tyrosyl-L-seryl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-glutaminyl-L-methionyl-L-alanyl-L-valyl-L-lysyl-L-lysyl-L-tyrosyl-L-leucyl-L-alanyl-L-alanyl-L-valyl-L-leucylglycyl-L-lysyl-L-arginyl-L-tyrosyl-L-lysyl-L-glutaminyl-L-arginyl-L-valyl-L-lysyl-L-asparaginyl-L-lysinamide, trifluoroacetate salt | $\begin{array}{r} \text { H-Phe-Thr-Asp-Ser-Tyr-Ser-Arg - Tyr-Arg-Lys- } \\ \text { Gln-Met-Ala-Val-Lys-Lys - Tyr-Leu-Ala-Ala- } \end{array}$ |
| :---: | :---: | :---: |
| Synonym: | Pituitary Adenylate Cyclase-activating Peptide (6-38) | Val-Leu-Gly-Lys-Arg-Tyr-Lys-Gin-Arg-Val- |
| MF: | $\mathrm{C}_{182} \mathrm{H}_{300} \mathrm{~N}_{56} \mathrm{O}_{45} \mathrm{~S} \cdot \mathrm{XCF}_{3} \mathrm{COOH}$ | Lys -Asn-Lys- $\mathrm{NH}_{2}$ |
| FW: | 4,024.8 |  |
| Purity: | 295\% | - $\mathrm{XCF}_{3} \mathrm{COOH}$ |
| Supplied as: | A lyophilized powder |  |
| Storage: | $-20^{\circ} \mathrm{C}$ |  |
| Stability: | $\geq 4$ years |  |

Laboratory Procedures
PACAP (6-38) (human, chicken, mouse, ovine, porcine, rat) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the PACAP (6-38) (human, chicken, mouse, ovine, porcine, rat) (trifluoroacetate salt) in water. The solubility of PACAP (6-38) (human, chicken, mouse, ovine, porcine, rat) (trifluoroacetate salt) in water is approximately $1 \mathrm{mg} / \mathrm{ml}$. We do not recommend storing the aqueous solution for more than one day.

## Description

Pituitary adenylate cyclase-activating peptide (PACAP) (6-38) is a PACAP receptor antagonist with $\mathrm{IC}_{50}$ values of 30,600 , and 40 nM , respectively for rat $\mathrm{PAC}_{1}$, rat $\mathrm{VPAC}_{1}$, and human $\mathrm{VPAC}_{2}$ recombinant receptors expressed in CHO cells. ${ }^{1}$ It binds to PACAP receptors in rat brain membrane (IC $50=39.14 \mathrm{nM}$ ) and to SH-SY5Y and SK-N-MC human neuroblastoma and T47D human breast cancer cells ( $\mathrm{IC}_{50} \mathrm{~S}=2.9,129$, and 227 nM , respectively) ${ }^{2,3}$ In vivo, in newborn pigs, PACAP $(6-38)(10 \mu \mathrm{M})$ inhibits vasodilation of pial arterioles induced by PACAP (1-38) (Item No. 24770), the full-length peptide. ${ }^{4}$ It also inhibits decreased food intake and reduced body weight in rats induced by cocaine- and amphetamine-regulated transcript peptides (CARTp) following intracerebroventricular administration of 0.3-3 mol per animal doses. ${ }^{5}$

## References

1. Gourlet, P., Vandermeers, A., Vandermeers-Piret, M.-C., et al. Eur. J. Pharmacol. 287(1), 7-11 (1995).
2. Moro, O., Wakita, K., Ohnuma, M., et al. J. Biol. Chem. 274(33), 23103-23110 (1999).
3. Eggenberger, M., Born, W., Zimmermann, U., et al. Neuropeptides 33(2), 107-114 (1999).
4. Lenti, L., Domoki, F., Kis, D., et al. Brain Res. 1165, 81-88 (2007).
5. Burgos, J.R., Iresjö, B.-M., and Smedh, U. PLoS One 8(8):e72347, (2013).
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[^0]:    WARNING
    THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

    ## SAFETY DATA

    This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

