

Product Data Sheet

| Product Name: | TIP 39, Tuberoinfundibular Neuropeptide | |
|-------------------|--|-------------------------------|
| Catalog Number: | AS-21687 (1 mg) | Lot Number: See label on vial |
| Sequence: | H-Ser-Leu-Ala-Leu-Ala-Asp-Asp-Ala-Ala-Phe-Arg-Glu-Arg-Ala-Arg-Leu- Leu-Ala-Ala-Leu-Glu-Arg-Arg-His-Trp-Leu-Asn-Ser-Tyr-Met-His-Lys-Leu- Leu-Val-Leu-Asp-Ala-Pro-OH (3-letter code) SLALADDAAFRERARLLAALERRHWLNSYMHKLLVLDAP (1-letter code) | |
| Molecular Weight: | 4505.3 | |
| | | |

Peptide Purity: >95%

Appearance: Lyophilized white powder

Peptide Reconstitution: Using H_2O , reconstitute by adding 50-60 µl to 1 mg TIP 39

Storage: TIP 39 is shipped at ambient temperature. Upon receipt, store lyophilized peptide at -20°C or lower. Reconstituted peptide can be aliquoted and stored at -20°C or lower.

Description: This is a tuberoinfundibular neuropeptide and parathyroid hormone 2 (PTH 2)-receptor agonist from hypothalmus. Synthetic TIP39 activates human and rat PTH2 receptors. Ref: Usdin, TB. et al. *Nat. Am.* **2**, 941 (1999); Piserchio, A. et al. *J. Biol. Chem.* **275**, 27284 (2000).

Additional Information: Listed below are relevant information that may provide a guideline on how to use this product. End users will have to adapt to their own specific applications.

Bovine TIP39 (AnaSpec, Inc., San Jose, CA) was dissolved in isotonic saline and injected icv. An equal volume of vehicle was injected as the control. Naloxone hydrochloride (Sigma, St. Louis, MO) was dissolved in isotonic saline and injected sc at a dose of 1.5 mg/rat in a volume of 0.25 ml. The ip injection in all experiments was performed at a volume of 2% BW. Rats were injected icv with TIP39 (100 pmol/rat) or vehicle and decapitated 5 or 15 min after injection-Sugimura, Y. et al. *Endocrinology*. **144**, 2791 (2003).

The peptide, bovine TIP39, SLALADDAAFRERARLLAALERRHWLNSYMHKLLVLDAP, was synthesized and purified by Anaspec, Inc. (San Jose, CA) and used without further purification. D spectra were collected with an Olis XL450 spectrometer interfaced with a personal computer. The instrument was calibrated using aqueous solutions of D-(+)-10-camphorsulfonic acid. A 74 µM sample of TIP39 (concentration determined by absorbance at 280 nm) was prepared by dissolving the peptide into a 50 mM aqueous solution of dodecylphosphocholine (DPC)- Piserchio, A. et al. *J. Biol. Chem.* **275**, 27284 (2000).

Human TIP39 was purchased from Anaspec, Inc. (San Jose, CA). Briefly, ligandstimulated cAMP accumulation was measured in cells preincubated for 15 min with IBMX (1 mM) and subsequently exposed 15 min at 37 C to various concentrations of the appropriate ligand. To evaluate desensitization of cAMP signaling, cells were preincubated 30 min with agonist, washed three times with PBS, and rechallenged with PTH(1–34) or TIP39 (100 nM) at times-<u>Bisello,</u> <u>Alessandro. et al. *Mol. Endocrinology.* **18**, 1486 (2004).</u>

Published Citations:

Hoare, S. R. J. et al. *J. Biol. Chem.* 275, 27274 (2000).
Piserchio, A. et al. *J. Biol. Chem.* 275, 27284 (2000).
Hoare, S. R. J. et al. *J. Biol. Chem.* 276, 7741 (2001).
Sugimura, Y. et al. *Endocrinology.* 144, 2791 (2003).
Barker, T. H. et al. *J. Biol. Chem.* 279, 23510 (2004).
Bisello, Alessandro. et al. *Mol. Endocrinology.* 18, 1486 (2004).

Related Products:

| Name | Cat # | Size |
|---|----------|------|
| Parathyroid Hormone (1-34), human | AS-20708 | 1 mg |
| (SVSEIQLMHNLGKHLNSMERVEWLRKKLQDVHNF) | | |
| Parathyroid Hormone (1-34), human, biotinylated | AS-20690 | 1 mg |
| (Biotin-SVSEIQLMHNLGKHLNSMERVEWLRKKLQDVHNF) | | |
| Parathyroid Hormone (1-34)-Lys(Biotin), human | AS-23647 | 1 mg |
| (SVSEIQLMHNLGKHLNSMERVEWLRKKLQDVHNFK(Biotin)) | | |

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