

PRODUCT INFORMATION



Melanostatin (frog, eel) (trifluoroacetate salt)

Item No. 41461

Formal Name: 19-L-lysine-neuropeptide Y (human), trifluoroacetate salt

Synonyms: Neuropeptide Y, NPY

Peptide Sequence: YPSKPDNPGEDAPAEDMAKYYSALRHYINLITRQRY-NH₂

MF: C₁₈₉H₂₈₅N₅₃O₅₇S • XCF₃COOH

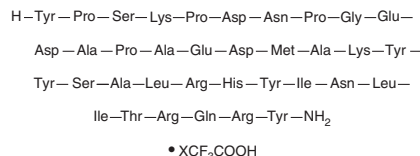
FW: 4,243.7

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Melanostatin (frog, eel) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the Melanostatin (frog, eel) (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Melanostatin (frog, eel) (trifluoroacetate salt) is sparingly soluble (1-10 mg/ml) in DMSO.

Description

Melanostatin is an endogenous peptide.^{1,2} It is formed from pro-neuropeptide Y when pro-neuropeptide Y is cleaved into melanostatin and C-flanking peptide of neuropeptide Y (NPY).² Melanostatin inhibits α -melanocyte-stimulating hormone (α -MSH) release from primary frog neurointermediate lobes (NILs; ED₅₀ = 100 nM).¹ It inhibits thyrotropin-releasing hormone-induced increases in intracellular calcium in primary frog melanotrope cells when used at a concentration of 100 nM. Intracerebroventricular administration of melanostatin (5 or 10 nmol/kg) increases food intake in frog larvae.³ It increases mean blood pressure in normotensive sharks when administered at a dose of 5 nmol/kg.⁴

References

- Galas, L., Tonon, M.C., Beaujean, D., *et al.* Neuropeptide Y inhibits spontaneous α -melanocyte-stimulating hormone (α -MSH) release via a Y₅ receptor and suppresses thyrotropin-releasing hormone-induced α -MSH secretion via a Y₁ receptor in frog melanotrope cells. *Endocrinology* **143**(5), 1686-1694 (2002).
- Holzer, P., Reichmann, F., and Farzi, A. Neuropeptide Y, peptide YY and pancreatic polypeptide in the gut-brain axis. *Neuropeptides* **46**(6), 261-274 (2012).
- Shimizu, S., Azuma, M., Morimoto, N., *et al.* Effect of neuropeptide Y on food intake in bullfrog larvae. *Peptides* **46**, 102-107 (2013).
- Preston, E., Jönsson, A.-C., McManus, C.D., *et al.* Comparative vascular responses in elasmobranchs to different structures of neuropeptide Y and peptide YY. *Regul. Pept.* **78**(1-3), 57-67 (1998).

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.

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