

PRODUCT INFORMATION



Peptide YY (3-36) (trifluoroacetate salt)

Item No. 16502

Formal Name: L-isoleucyl-L-lysyl-L-prolyl-L- α -glutamyl-L-alanyl-L-prolylglycyl-L- α -glutamyl-L- α -aspartyl-L-alanyl-L-seryl-L-prolyl-L- α -glutamyl-L- α -glutamyl-L-leucyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-tyrosyl-L-alanyl-L-seryl-L-leucyl-L-arginyl-L-histidyl-L-tyrosyl-L-leucyl-L-asparaginyl-L-leucyl-L-valyl-L-threonyl-L-arginyl-L-glutaminyl-L-arginyl-L-tyrosinamide, trifluoroacetate salt

Ile — Lys — Pro — Glu — Ala — Pro — Gly — Glu — Asp — Ala —
Ser — Pro — Glu — Glu — Leu — Asn — Arg — Tyr — Tyr — Ala —
Ser — Leu — Arg — His — Tyr — Leu — Asn — Leu — Val — Thr —
Arg — Gln — Arg — Tyr — NH₂
• XCF₃COOH

Synonyms: Pancreatic Peptide YY,
Peptide Tyrosine Tyrosine
MF: C₁₈₀H₂₇₉N₅₃O₅₄ • XCF₃COOH
FW: 4,049.5
Purity: ≥95%
Supplied as: A lyophilized powder
Storage: -20°C
Stability: ≥4 years

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

Laboratory Procedures

Peptide YY (3-36) (PYY) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the PYY (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. PYY (trifluoroacetate salt) is soluble in organic solvents such as DMSO. It is also soluble in water. The solubility of PYY (trifluoroacetate salt) in water is approximately 1 mg/ml, respectively. We do not recommend storing the aqueous solution for more than one day.

Description

PYY is a polypeptide that is released postprandially in proportion to meal energy content by endocrine L cells in the ileum and colon in order to regulate appetite.¹ PYY, along with neuropeptide Y (NPY; Item No. 15071), inhibits gastrointestinal motility and electrolyte secretion, which is thought to indicate satiety through a potent feedback signal on hypothalamic circuits.^{1,2} Upon release, PYY is cleaved to PYY (3-36), which is a preferred agonist at presynaptic inhibitory type 2 NPY autoreceptors (EC₅₀ = 11.4 nM in human colon mucosa).³ PYY (3-36) has been associated with dose-dependent weight loss in various obesity models including *ob/ob* mice, diet-induced obese mice, and non-diabetic fatty Zucker rats.²

References

1. 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).
2. le Roux, C.W. and Bloom, S.R. Peptide YY, appetite and food intake. *Proc. Nutr. Soc.* **64**(2), 213-216 (2005).
3. Cox, H.M. and Tough, I.R. Neuropeptide Y, Y1, Y2 and Y4 receptors mediate Y agonist responses in isolated human colon mucosa. *Br. J. Pharmacol.* **135**(6), 1505-1512 (2002).

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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