

# PRODUCT INFORMATION



## Glucose-dependent Insulinotropic Polypeptide (1-42) (porcine) (trifluoroacetate salt)

Item No. 36905

**Formal Name:** L-tyrosyl-L-alanyl-L- $\alpha$ -glutamylglycyl-L-threonyl-L-phenylalanyl-L-isoleucyl-L-seryl-L- $\alpha$ -aspartyl-L-tyrosyl-L-seryl-L-isoleucyl-L-alanyl-L-methionyl-L- $\alpha$ -aspartyl-L-lysyl-L-isoleucyl-L-arginyl-L-glutamyl-L-glutamyl-L- $\alpha$ -aspartyl-L-phenylalanyl-L-valyl-L-asparaginyl-L-tryptophyl-L-leucyl-L-leucyl-L-alanyl-L-glutamyl-L-lysylglycyl-L-lysyl-L-lysyl-L-seryl-L- $\alpha$ -aspartyl-L-tryptophyl-L-lysyl-L-histidyl-L-asparaginyl-L-isoleucyl-L-threonyl-L-tyrosyl-L-alanyl-L- $\alpha$ -glutamylglycyl-L-threonyl-L-phenylalanyl-L-isoleucyl-L-seryl-L- $\alpha$ -aspartyl-L-tyrosyl-L-seryl-L-isoleucyl-L-alanyl-L-methionyl-L- $\alpha$ -aspartyl-L-lysyl-L-isoleucyl-L-arginyl-L-glutamyl-L-glutamyl-L- $\alpha$ -aspartyl-L-phenylalanyl-L-valyl-L-asparaginyl-L-tryptophyl-L-leucyl-L-leucyl-L-alanyl-L-glutamyl-L-lysylglycyl-L-lysyl-L-lysyl-L-seryl-L- $\alpha$ -aspartyl-L-tryptophyl-L-lysyl-L-histidyl-L-asparaginyl-L-isoleucyl-L-threonyl-L-glutamine, trifluoroacetate salt

H-Tyr-Ala-Glu-Gly-Thr-Phe-Ile-Ser-Asp-Tyr-Ser-Ile-Ala-Met-Asp-Lys-Ile-Arg-Gln-Gln-Asp-Phe-Val-Asn-Trp-Leu-Leu-Ala-Gln-Lys-Gly-Lys-Lys-Ser-Asp-Trp-Lys-His-Asn-Ile  
Thr-Gln-OH  
• XCF<sub>3</sub>COOH

**Synonyms:** Gastric Inhibitory Peptide (1-42), GIP (1-42)  
**Peptide Sequence:** YAEGTFISDYSIAMDKIRQQDFVNWLLAQKGGKSDWKHNITQ-OH  
**MF:** C<sub>225</sub>H<sub>342</sub>N<sub>60</sub>O<sub>66</sub>S • XCF<sub>3</sub>COOH  
**FW:** 4,975.6  
**Purity:** ≥98%  
**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

Glucose-dependent Insulinotropic Polypeptide (GIP) (1-42) (porcine) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the GIP (1-42) (porcine) (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

### Description

GIP (1-42) is an endogenous 42-amino acid peptide incretin hormone that induces insulin secretion.<sup>1,2</sup> It is expressed in intestinal neuroendocrine K cells and the submandibular gland and is released into circulation postprandially. GIP (1-42) inhibits histamine, pentagastrin, and insulin-induced gastric acid and pepsin secretion, increases glucose-induced insulin release, and stimulates gastric emptying in rats.<sup>3</sup>

### References

1. Fehmann, H.-C. and Göke, B. Characterization of GIP(1-30) and GIP(1-42) as stimulators of proinsulin gene transcription. *Peptides* **16(6)**, 1149-1152 (1995).
2. Siskos, A.P., Katsila, T., Balafas, E., et al. Simultaneous absolute quantification of the glucose-dependent insulinotropic polypeptides GIP<sub>1-42</sub> and GIP<sub>3-42</sub> in mouse plasma by LC/ESI-MS/MS: Preclinical evaluation of DP-IV inhibitors. *J. Proteome Res.* **8(7)**, 3487-3496 (2009).
3. Rossowski, W.J., Zacharia, S., Mungan, Z., et al. Reduced gastric acid inhibitory effect of a pGIP(1-30)NH<sub>2</sub> fragment with potent pancreatic amylase inhibitory activity. *Regul. Pept.* **39(1)**, 9-17 (1992).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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