

Product Data Sheet

Product Name: Glucose-dependent Insulinotropic Polypeptide (1-42) (porcine) (trifluoroacetate salt)
Cat. No.: GC92133

Chemical Properties

Cas. No.

Chemical Name L-tyrosyl-L-alanyl-L-α-glutamylglycyl-L-threonyl-L-phenylalanyl-L-isoleucyl-L-seryl-L-α-aspartyl-L-tyrosyl-L-seryl-L-isoleucyl-L-alanyl-L-methionyl-L-α-aspartyl-L-lysyl-L-isoleucyl-L-arginyl-L-glutamyl-L-glutamyl-L-α-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-α-aspartyl-L-tryptophyl-L-lysyl-L-histidyl-L-asparaginyl-L-isoleucyl-L-threonyl-L-tyrosyl-L-alanyl-L-α-glutamylglycyl-L-threonyl-L-phenylalanyl-L-isoleucyl-L-seryl-L-α-aspartyl-L-tyrosyl-L-seryl-L-isoleucyl-L-alanyl-L-methionyl-L-α-aspartyl-L-lysyl-L-isoleucyl-L-arginyl-L-glutamyl-L-glutamyl-L-α-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-α-aspartyl-L-tryptophyl-L-lysyl-L-histidyl-L-asparaginyl-L-isoleucyl-L-threonyl-L-glutamine, trifluoroacetate salt

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Caution: Product has not been fully validated for medical applications. For research use only.

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Product Data Sheet

Formula	C ₂₂₅ H ₃₄₂ N ₆₀ O ₆₆ S ? XCF ₃ COOH	M.Wt	4975.6
Solubility	Water: Soluble	Storage	-20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	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 ₃ COOH		

Background

Glucose-dependent Insulinotropic Polypeptide (GIP) (1-42) is an endogenous 42-amino acid peptide incretin hormone that induces insulin secretion.^{1,2} 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.³

References:

- [1]. Fehmann, H.-C., and Goke, 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 GIP1-42 and GIP3-42 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)NH₂ fragment with potent pancreatic amylase inhibitory activity. *Regul. Pept.* 39(1)9-17(1992).

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