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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

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- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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PRODUCT INFORMATION

Gastric Inhibitory Peptide (human) (trifluoroacetate salt)

Item No. 25004

Formal 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-histidyl-L-glutaminyl-L-glutaminyl-L-α-aspartyl-L-phenylalanyl-L-valyl-L-asparaginyl-L-tryptophyl-L-leucyl-L-leucyl-L-alanyl-L-glutaminyl-L-lysylglycyl-L-lysyl-L-lysyl-L-asparaginyl-L-α-aspartyl-L-tryptophyl-L-lysyl-L-histidyl-L-asparaginyl-L-isoleucyl-L-threonyl-L-glutamine, trifluoroacetate salt

Synonyms: GIP (human), Glucose-dependent Insulinotropic Peptide (human)

MF: $C_{226}H_{338}N_{60}O_{66}S \bullet XCF_3COOH$

FW: 4,983.5

Purity: ≥95%

Supplied as: A lyophilized powder

Storage: -20°C

Stability: ≥2 years

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

Laboratory Procedures

Gastric inhibitory peptide (GIP) (human) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the GIP (human) (trifluoroacetate salt) in water. The solubility of GIP (human) (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

GIP is an endogenous 42-amino acid peptide incretin hormone that induces insulin secretion in response to glucose.[1] It belongs to the secretin/glucagon superfamily of peptides, which includes secretin (Item Nos. 24990 | 24561), glucagon (Item No. 24204), glucagon-like peptide-1 (GLP-1; Item No. 24460), GLP-2 (Item No. 24414), and pituitary adenylate cyclase-activating polypeptide (PACAP; Item Nos. 24769 | 24770).[2] GIP is a GIP receptor agonist that binds to rat recombinant GIP receptors expressed in CHO-K1 cells (IC_{50} = 3.2 nM) and increases cAMP accumulation (EC_{50} = 377 pM).[3] It stimulates insulin secretion from BRIN-BD11 rat pancreatic β-cells when used at a concentration of 10 nM.[4] GIP (1 pmol/min per 100 g) decreases blood glucose level and increases plasma insulin level in rats following glucose challenge.[3] It also decreases plasma glucose level and increases insulin level in *ob/ob* mice following glucose challenge when administered at a dose of 25 nmol/kg.[5]

References

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3. Hinke, S.A., Manhart, S., Pamir, N., *et al. Biochim. Biophys. Acta* **1547(1)**, 143-155 (2001).
4. Kerr, B.D., Flatt, A.J., Flatt, P.R., *et al. Biochem. Biophys. Res. Commun.* **404(3)**, 870-876 (2011).
5. O'Harte, F.P., Hunter, K., Gault, V.A., *et al. Am. J. Physiol. Endocrinol. Metab.* **292(6)**, E1674-E1682 (2007).

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