(Pro3) GIP, human

Cat. No.:	HY-P3584
CAS No.:	299898-52-5
Molecular Formula:	$C_{226}H_{338}N_{60}O_{64}S$
Molecular Weight:	4951.53
Sequence:	Tyr-Ala-Pro-Gly-Thr-Phe-Ile-Ser-Asp-Tyr-Ser-Ile-Ala-Met-Asp-Lys-Ile-His-Gln-Gln-Asp-Phe-Val-Asn-Trp-Leu-Leu-Ala-Gln-Lys-Gly-Lys-Lys-Asn-Asp-Trp-Lys-His-Asn-Ile-Thr-Gln
Sequence Shortening:	YAPGTFISDYSIAMDKIHQQDFVNWLLAQKGKKNDWKHNITQ
Target:	Insulin Receptor
Pathway:	Protein Tyrosine Kinase/RTK
Storage:	Sealed storage, away from moisture and light Powder -80°C 2 years -20°C 1 year * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)

BIOLOGICAL ACTIVITY

Description	(Pro3) GIP, human ((Pro3) Gastric Inhibitory Peptide, human) is an efficacious, stable and specific human GIP receptor (hGIPR) full agonist. (Pro3) GIP, human has high binding affinity for human GIPR with K_i/ K_d values of 0.90 nM. (Pro3) GIP, human can be used for the research of obesity-related diabetes[1][2].
IC_{50} & Target	EC50: 0.026 nM (hGIPR)[2] Ki/Kd: 0.90 nM (hGIPR); 1.1 nM (Rat GIPR); 0.72 nM (Mouse GIPR)[2]
In Vitro	(Pro3) GIP, human induces cAMP accumulation with an EC_{50} value of 0.026 nM[2]. (Pro3) GIP, human has high binding affinity for human GIPR, Rat GIPR and Mouse GIPR with K_i/ K_d values of 0.90 nM, 1.1 nM and 0.72 nM, respectively[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	(Pro3) GIP, human has comparatively weak partial agonist effect in rodent models[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Victor A Gault, et al. Chemical ablation of gastric inhibitory polypeptide receptor action by daily (Pro3)GIP administration improves glucose tolerance and ameliorates insulin resistance and abnormalities of islet structure in obesity-related diabetes. Diabetes. 2005 Aug;54(8):2436-46.

[2]. A H Sparre-Ulrich, et al. Species-specific action of (Pro3)GIP - a full agonist at human GIP receptors, but a partial agonist and competitive antagonist at rat and mouse GIP receptors. Br J Pharmacol. 2016 Jan;173(1):27-38.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA