

[D-Ala2]-GIP (human)

Cat. No.:	HY-P3247	
CAS No.:	444073-04-5	
Molecular Formula:	C ₂₂₆ H ₃₃₈ N ₆₀ O ₆₆ S	
Molecular Weight:	4983.6	Y-{d-Ala}-EGTFISDYSIAMDKIHQQ DFVNWLLAQKGGKNDWKHNITQ
Sequence:	Tyr-{d-Ala}-Glu-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:	Y-{d-Ala}-EGTFISDYSIAMDKIHQQDFVNWLLAQKGGKNDWKHNITQ	
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)	

SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (10.03 mM; Need ultrasonic)

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	0.2007 mL	1.0033 mL	2.0066 mL
	5 mM	0.0401 mL	0.2007 mL	0.4013 mL
	10 mM	0.0201 mL	0.1003 mL	0.2007 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

[D-Ala2]-GIP (human) is a GIP receptor agonist. [D-Ala2]-GIP (human) improves glucose tolerance. [D-Ala2]-GIP (human) shows neuroprotective activity in MPTP-induced Parkinson's disease model. [D-Ala2]-GIP (human) also improves cognitive function and hippocampal synaptic plasticity in obese diabetic rats. [D-Ala2]-GIP (human) can be used for research of type 2 diabetes, Parkinson's disease, etc^[1]

REFERENCES

[1]. Hinke SA, et al. Dipeptidyl peptidase IV-resistant [D-Ala(2)]glucose-dependent insulinotropic polypeptide (GIP) improves glucose tolerance in normal and obese

diabetic rats. *Diabetes*. 2002 Mar;51(3):652-61.

[2]. Verma MK, et al. Effect of D-Ala2GIP, a stable GIP receptor agonist on MPTP-induced neuronal impairments in mice. *Eur J Pharmacol*. 2017 Jun 5;804:38-45.

[3]. Porter DW, et al. Prolonged GIP receptor activation improves cognitive function, hippocampal synaptic plasticity and glucose homeostasis in high-fat fed mice. *Eur J Pharmacol*. 2011 Jan 15;650(2-3):688-93.

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