Data Sheet (Cat.No.TP2019)

TargetMol

[D-Ala2]-GIP (human)

Chemical Properties

CAS No. : 444073-04-5

Formula: C226H338N60O66S

Molecular Weight: 4983.58

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Highly potent GIP receptor agonist (EC50 = 630 ± 119 pM). Displays equivalent cAMP stimulating properties and improved resistance to enzymatic degradation compared to native GIP in cells expressing wild type GIP receptor. Improves glucose tolerance, insulin release and cognitive function in various animal models of obesity and diabetes. Displays neuroprotective effects in an MPTP model of PD.
Targets(IC50)	IGF-1R

Solubility Information

Solubility	H2O: 1 mg/mL (0.2 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
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
50 mM	0.004 mL	0.0201 mL	0.0401 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Hinke et al (2002) Dipeptidyl peptidase IV-resistant [D-Ala2]glucose-dependent Insotropic polypeptide (GIP) improves glucose tolerance in normal and obese diabetic rats. Diabetes. 51 652 PMID:
Porter et al (2011) Prolonged GIP receptor activation improves cognitive function, hippocampal synaptic plasticity and glucose homeostasis in high-fat fed mice. Eur.J.Pharmacol. 650 688 PMID:
Verma et al (2017) Effect of D-Ala2GIP, a stable GIP receptor agonist on MPTP-induced neuronal impairments in mice. Eur.J.Pharmacol. 804 38 PMID:

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