

GLP-1(7-36), amide acetate

Cat. No.: HY-P0054
CAS No.: 1119517-19-9
Molecular Formula: C₁₄₉H₂₂₆N₄₀O₄₅·xC₂H₄O₂
Molecular Weight: 3357.73
Sequence: His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys-Glu
 -Phe-Ile-Ala-Trp-Leu-Val-Lys-Gly-Arg-NH₂

HAEGTFTSDVSSYLEGQAAKEFIAWLKGR-NH₂



Sequence Shortening: HAEGTFTSDVSSYLEGQAAKEFIAWLKGRNH₂

Target: GCGR

Pathway: GPCR/G Protein

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	H ₂ O : 100 mg/mL (29.78 mM); Need ultrasonic)					
		Solvent Concentration	Mass			
	Preparing Stock Solutions			1 mg	5 mg	10 mg
		1 mM		0.2978 mL	1.4891 mL	2.9782 mL
		5 mM		0.0596 mL	0.2978 mL	0.5956 mL
	10 mM		0.0298 mL	0.1489 mL	0.2978 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: PBS Solubility: 25 mg/mL (7.45 mM); Clear solution; Need ultrasonic					

BIOLOGICAL ACTIVITY

Description	GLP-1(7-36), amide acetate is a major intestinal hormone that stimulates glucose-induced insulin secretion from β cells.
In Vitro	Cells treated with phorbol 12-myristate 13-acetate for 2 h has significantly higher active GLP-1(7-36) Acetate (Human GLP-1-(7-36)-amide Acetate) concentrations in the media than those in the control. The glucose treatment also increases active GLP-1 secretion from cells in dose-dependent manner. Palmitic, oleic, linoleic or linolenic acid dose-dependently stimulated active GLP-1 secretion from cells. Active GLP-1 secretion is significantly greater with unsaturated fatty acids such as oleic, linoleic and linolenic acids than with palmitic acid. The treatment of NCI-H716 cells with CPE dose-dependently increases active GLP-1 concentrations in the media. A 37% increase is observed in active GLP-1 secretion from these cells at a

concentration of 0.1 % CPE^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Gastric administration of glucose increases active GLP-1(7-36) amide levels in the portal blood after 10 min, followed by a marked decrease at 30 min. The gastric administration of TO also increases active GLP-1 levels after 10 min, and followed by a decrease to basal levels at 60 min. Individually, glucose and TO increase the secretion of GLP-1 in a dose-dependent manner. Furthermore, the co-administration of glucose and TO additively increase peak GLP-1 levels. CPE-administered mice have higher active GLP-1 levels in the portal blood at 10 and 30 min than those in the control mice. When glucose is administered with CPE, active GLP-1 and insulin levels in the portal blood are slightly higher in CPE-administered mice than in the control mice. High-fat diet-fed C57BL/6J mice develop hyperglycaemia and impair glucose tolerance^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- MAbs. Jan-Dec 2021;13(1):1893425.
- Int J Endocrinol. 2020 Jun 19;2020:1484321.
- Patent. US20200283424A1.
- Patent. US20200283424A1.

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REFERENCES

[1]. Fujii Y et al. Ingestion of coffee polyphenols increases postprandial release of the active glucagon-like peptide-1(GLP-1(7-36)) amide in C57BL/6J mice. J Nutr Sci. 2015 Mar 3

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