

PRODUCT INFORMATION



GLP-1 (28-36) amide (trifluoroacetate salt)

Item No. 41249

Formal Name: L-phenylalanyl-L-isoleucyl-L-alanyl-L-tryptophyl-L-leucyl-L-valyl-L-lysylglycyl-L-argininamide, trifluoroacetate salt

Synonyms: Glucagon-like Peptide 1 (28-36) amide, Phe-Ile-Ala-Trp-Leu-Val-Lys-Gly-Arg-NH₂ H-Phe-Ile-Ala-Trp-Leu-Val-Lys-Gly-Arg-NH₂

Peptide Sequence: FIAWLVKGR-NH₂

MF: C₅₄H₈₅N₁₅O₉ • XCF₃COOH

FW: 1,088.4

Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

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

Laboratory Procedures

Glucagon-like peptide 1 (GLP-1) (28-36) amide is supplied as a solid. A stock solution may be made by dissolving the GLP-1 (28-36) amide in the solvent of choice, which should be purged with an inert gas. GLP-1 (28-36) amide is slightly soluble (0.1-1 mg/ml) in acetonitrile, methanol, and chloroform.

Description

GLP-1 (28-36) amide is a peptide and an active metabolite of the endogenous GLP-1R agonist GLP-1 (7-36) amide (Item No. 15069).^{1,2} It is formed from GLP-1 (7-36) amide by neprilysin (NEP).² GLP-1 (28-36) amide (100 nM) inhibits decreases in ATP levels induced by hydrogen peroxide and increases in reactive oxygen species (ROS) levels induced by *tert*-butyl hydroperoxide (*t*-BHP) in primary mouse hepatocytes and H-4-II-E hepatoma cells.¹ It reduces body weight gain, the ratio of weight gain to food intake, and hepatic gluconeogenesis in a mouse model of obesity induced by a high-fat diet (HFD) when administered at a dose of 18.5 nmol/kg per day.³ GLP-1 (28-36) amide decreases plasma levels of glucose and insulin and hepatic triglyceride levels in a mouse model of obesity induced by a very high-fat diet (VHFD) when infused at a rate of 18.5 nmol/kg per day.⁴

References

1. Tomas, E., Stanojevic, V., and Habener, J.F. GLP-1-derived nonapeptide GLP-1(28-36)amide targets to mitochondria and suppresses glucose production and oxidative stress in isolated mouse hepatocytes. *Regul. Pept.* **167(2-3)**, 177-184 (2011).
2. Hupe-Sodmann, K., McGregor, G.P., Bridenbaugh, R., *et al.* Characterisation of the processing by human neutral endopeptidase 24.11 of GLP-1(7-36) amide and comparison of the substrate specificity of the enzyme for other glucagon-like peptides. *Regul. Pept.* **58(3)**, 149-156 (1995).
3. Ip, W., Shao, W., Chiang, Y.-t.A., *et al.* GLP-1-derived nonapeptide GLP-1(28-36)amide represses hepatic gluconeogenic gene expression and improves pyruvate tolerance in high-fat diet-fed mice. *Am. J. Physiol. Endocrinol. Metab.* **305(11)**, E1348-E1358 (2013).
4. Tomas, E., Wood, J.A., Stanojevic, V., *et al.* GLP-1-derived nonapeptide GLP-1(28-36)amide inhibits weight gain and attenuates diabetes and hepatic steatosis in diet-induced obese mice. *Regul. Pept.* **169(1-3)**, 43-48 (2011).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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