

PRODUCT INFORMATION



GLP-1 (9-36) amide (trifluoroacetate salt)

Item No. 36863

Formal Name: L- α -glutamylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L- α -aspartyl-L-valyl-L-seryl-L-seryl-L-tyrosyl-L-leucyl-L- α -glutamylglycyl-L-glutamyl-L-alanyl-L-alanyl-L-lysyl-L- α -glutamyl-L-phenylalanyl-L-isoleucyl-L-alanyl-L-tryptophyl-L-leucyl-L-valyl-L-lysylglycyl-L-argininamide, trifluoroacetate salt

Synonym: Glucagon-like Peptide 1 (9-36) amide

Peptide Sequence: EGTFTSDVSSYLEGQAAKEFIAWLVKGR-NH₂

MF: C₁₄₀H₂₁₄N₃₆O₄₃ • XCF₃COOH

FW: 3,089.4

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

H—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

• XCF₃COOH

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

Laboratory Procedures

GLP-1 (9-36) amide (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the GLP-1 (9-36) amide (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. GLP-1 (9-36) amide (trifluoroacetate salt) is soluble (≥10 mg/ml) in DMSO.

Description

Glucagon-like peptide 1 (GLP-1) (9-36) amide is a peptide agonist of the GLP-1 receptor (GLP-1R) and an active metabolite of GLP-1 (7-36) amide (Item No. 15069).^{1,2} It is formed from GLP-1 (7-36) by dipeptidyl peptidase 4 (DPP-4).² GLP-1 (9-36) amide induces cAMP accumulation in a reporter assay using HEK293 cells expressing human GLP-1R (EC₅₀ = 309.03 μM).¹ It reduces blood glucose levels in pigs when infused at a concentration of 2.55 pmol/kg per minute.³ Infusion of GLP-1 (9-36) amide (1.5 pmol/kg per minute) decreases left ventricle systolic pressure and end-diastolic pressure and heart contractility and rate in a dog model of dilated cardiomyopathy.⁴ It increases mean arterial blood pressure, stroke volume, myocardial glucose uptake, and plasma norepinephrine levels in the same model.

References

- Li, N., Lu, J., and Willars, G.B. Allosteric modulation of the activity of the glucagon-like peptide-1 (GLP-1) metabolite GLP-1 9-36 amide at the GLP-1 receptor. *PLoS One* **7**(10), e47936 (2012).
- Deacon, C.F., Johnsen, A.H., and Holst, J.J. Degradation of glucagon-like peptide-1 by human plasma *in vitro* yields an N-terminally truncated peptide that is a major endogenous metabolite *in vivo*. *J. Clin. Endocrinol. Metab.* **80**(3), 952-957 (1995).
- Deacon, C.F., Plamboeck, A., Møller, S., et al. GLP-1-(9-36) amide reduces blood glucose in anesthetized pigs by a mechanism that does not involve insulin secretion. *Am. J. Physiol. Endocrinol. Metab.* **282**(4), E873-E879 (2002).
- Nikolaidis, L.A., Elahi, D., Shen, Y.-T., et al. Active metabolite of GLP-1 mediates myocardial glucose uptake and improves left ventricular performance in conscious dogs with dilated cardiomyopathy. *Am. J. Physiol. Heart. Circ. Physiol.* **289**(6), H2401-H2408 (2005).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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