

PRODUCT INFORMATION



GLP-1 (1-37) (human, rat, mouse, bovine) (trifluoroacetate salt)

Item No. 24460

Formal Name:	glucagon-like peptide I (human, rat, mouse, bovine), trifluoroacetate salt	H – His – Asp – Glu – Phe – Glu – Arg – His – Ala – Glu – Gly – Thr – Phe – Thr – Ser – Asp – Val – Ser – Ser – Tyr – Leu –
Synonym:	Glucagon-like Peptide 1 (1-37)	Glu – Gly – Gln – Ala – Ala – Lys – Glu – Phe – Ile – Ala –
MF:	C ₁₈₆ H ₂₇₅ N ₅₁ O ₅₉ • XCF ₃ COOH	Trp – Leu – Val – Lys – Gly – Arg – Gly – OH
FW:	4,169.5	
Purity:	≥95%	
Supplied as:	A lyophilized powder	
Storage:	-20°C	• XCF ₃ COOH
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) (1-37) (human, rat, mouse, bovine) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the GLP-1 (1-37) (human, rat, mouse, bovine) (trifluoroacetate salt) in water. The solubility of GLP-1 (1-37) (human, rat, mouse, bovine) (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

GLP-1 (1-37) is a 37-residue incretin hormone that is cleaved *in vivo* into active truncated forms.¹ GLP-1 (1-37) decreases plasma glucose level in high-fat-fed mice when administered at 25 nmol/kg but does not affect plasma insulin level.² Pretreatment with GLP-1 (1-37) (24 nmol/kg) prevents blood glucose increases in fasted and glucose challenged mice with diabetes induced by streptozotocin (STZ; Item No. 13104).³ It inhibits polyphagia and polydipsia in STZ-induced diabetic mice 10 and 20 days, respectively, following initiation of GLP-1 (1-37) administration at a dose of 24 nmol/kg. Pretreatment with GLP-1 (1-37) (24 nmol/kg) also inhibits loss of pancreatic islets and global and pancreatic oxidative stress in mice with STZ-induced diabetes.

References

1. Baggio, L.L. and Drucker, D.J. Biology of incretins: GLP-1 and GIP. *Gastroenterology* **132(6)**, 2131-2157 (2007).
2. Lennox, R., Porter, D.W., Flatt, P.R., *et al.* (Val8)GLP-1-Glu-PAL: A GLP-1 agonist that improves hippocampal neurogenesis, glucose homeostasis, and β -cell function in high-fat-fed mice. *ChemMedChem* **8(4)**, 595-602 (2013).
3. Wu, Y.-L., Huang, J., Liu, J., *et al.* Protective effect of recombinant human glucagon-like peptide-1 (rhGLP-1) pretreatment in STZ-induced diabetic mice. *J. Pept. Sci.* **17(7)**, 499-504 (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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