PRODUCT INFORMATION

A8SGLP-1 (trifluoroacetate salt)

Item No. 41264

CAS Registry No.: 753024-08-7
Formal Name: L-histidyl-L-seryl-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-glutaminyl-L-alanyl-L-alanyl-L-lysyl-L-α-glutamyl-L-phenylalanyl-L-isoleucyl-L-alanyl-L-tryptophyl-L-leucyl-L-valyl-L-lysylglycyl-L-arginyl-glycinamide, trifluoroacetate salt
Peptide Sequence: HSEGTFTSDVSSYLEGQAAKEFIAWLVKGRG-NH_2
MF: $C_{151}H_{229}N_{41}O_{47} \bullet XCF_3COOH$
FW: 3,370.7
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years

H – His – Ser – 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 –
Gly – NH_2
• XCF_3COOH

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

Laboratory Procedures

A8SGLP-1 (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the A8SGLP-1 (trifluoroacetate salt)in the solvent of choice, which should be purged with an inert gas. A8SGLP-1 (trifluoroacetate salt) is soluble (≥10 mg/ml) in ethanol and sparingly soluble (1-10 mg/ml) in DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of A8SGLP-1 (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. A8SGLP-1 (trifluoroacetate salt) is sparingly soluble in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

A8SGLP-1 is a peptide agonist of glucagon-like peptide 1 receptor (GLP-1R) and a derivative of GLP-1 (7-36) amide (Item No. 15069).[1] It induces cAMP accumulation in RIN T3 rat pancreatic insuloma cells (EC_{50} = 15 nM). Oral administration of lyophilized *L. lactis* expressing A8SGLP-1 reduces blood levels of glucose in the oral glucose tolerance test (OGTT), serum levels of Il-1β, Il-6, and Tnf-α, and fat mass in diabetic *db/db* mice.[2]

References

1. Sarrauste de Menthière, C., Chavanieu, A., Grassy, G., *et al.* Structural requirements of the N-terminal region of GLP-1-[7-37]-NH_2 for receptor interaction and cAMP production. *Eur. J. Med. Chem.* **39(6)**, 473-480 (2004).
2. Zhang, H., Dong, M., Yuan, S., *et al.* Oral glucagon-like peptide 1 analogue ameliorates glucose intolerance in db/db mice. *Biotechnol. Lett.* **44(10)**, 1149-1162 (2022).

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