

Semaglutide acetate

05/20

ALTERNATE NAMES:	NN9535; NNC 0113-0217; Ozempic
CATALOG #:	B3030-1 1 mg B3030-5 5 mg
MOLECULAR FORMULA:	$C_{187}H_{291}N_{45}O_{59} \cdot C_2H_4O_2$
MOLECULAR WEIGHT:	4173.6
CAS NUMBER:	1997361-85-9
APPEARANCE:	Solid lyophilized powder
PURITY:	≥95%
SOLUBILITY:	~30 mg/ml in DMSO and DMF ~0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2)
SEQUENCE:	H-His-Aib-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-AlaLys(AEEAc-AEEAc-γ-Glu-17-carboxyheptadecanoyl)-Glu-Phe-Ile-Ala-Trp-Leu-Val-ArgGly-Arg-Gly-OH
DESCRIPTION:	Semaglutide is an agonist of glucagon-like peptide 1 receptor (GLP-1R). It is a glucagon-like peptide-1 (GLP-1) analogue approved for the treatment of type 2 diabetes mellitus. It has two amino acid substitutions compared to human GLP-1 (Aib(8), Arg(34)) and is derivatized at lysine 26. The GLP-1R affinity of semaglutide (0.38 ± 0.06 nM) was lesser compared to liraglutide, whereas the albumin affinity was increased. It lowers blood glucose by stimulating the release of insulin and also lowers body weight. It is long-acting, with an extended half-life of approximately 1 week.
STORAGE TEMPERATURE:	-20°C
HANDLING:	Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.
REFERENCES:	1. Dhillon S. Semaglutide: First Global Approval. Review Drugs 78(2):275-284 (2018). 2. Lau, J., Bloch, P., Schäffer, L., et al. Discovery of the Once-Weekly Glucagon-Like Peptide-1 (GLP-1) Analogue Semaglutide. J. Med. Chem. Sep 24;58(18):7370-80 (2015). 3. Marso, S.P., Bain, S.C., Consoli, A., et al. Semaglutide and Cardiovascular Outcomes in Patients With Type 2 Diabetes. 10;375(19):1834-1844 (2016).
RELATED PRODUCTS:	Liraglutide (Cat. No. B2580) Nateglinide (Cat. No. B2109) Repaglinide (Cat. No. B2110) Ipragliflozin (Cat. No. B1926) Licogliflozin (Cat. No. B3028)
DISCLAIMER:	FOR RESEARCH USE ONLY! Not to be used on humans.