9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

Semaglutide

Semaglutide
HRM0103

Product Overview

Name	Semaglutide

Description

Semaglutide

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

The protein was lyophilized with no additives.

Stability

Lyophilized Semaglutide although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Semaglutide should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 97.0% as determined by analysis by RP-HPLC.

Amino acid sequence

H-His-Aib-Glu-
Gly-Thr-Phe-Thr-Ser-Asp-Val-
Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys(AEEAc-AEEAc-γ-Glu-17-carboxyheptadecanoyl)-Glu-Phe-Ile-Ala-Trp-Leu-Val-Arg-Gly-Arg-Gly-OH.

Solubility

It is recommended to reconstitute the lyophilized Semaglutide in sterile 18MΩ-cm H 2 O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Background

Semaglutide, a glucagon-like peptide-1 receptor agonist (GLP-1 RA), has emerged as a breakthrough in the field of diabetes management and metabolic disorders. It is recognized for its potent glucose-lowering effects, weight management properties, and cardiovascular benefits. Beyond diabetes, semaglutide is under investigation for its potential applications in obesity treatment and other related conditions. This research aims to comprehensively explore semaglutide, shedding light on its multifaceted mechanisms of action and its broader therapeutic implications. The primary objective of this research is to elucidate the mechanisms underlying the glucose-lowering and metabolic

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effects of semaglutide. In vitro and in vivo experiments will be conducted to investigate how semaglutide interacts with GLP-1 receptors, influences insulin secretion, and modulates glucose homeostasis. Understanding these mechanisms is crucial for harnessing the full therapeutic potential of semaglutide. The second objective is to assess the clinical relevance of semaglutide in diabetes management. Clinical trials involving individuals with type 2 diabetes will be conducted to evaluate the efficacy, safety, and long-term outcomes of semaglutide treatment. These investigations may provide valuable insights into its use as a monotherapy or adjunct therapy in diabetes care. The third objective is to explore the potential applications of semaglutide beyond diabetes. Research will investigate its role in obesity treatment, cardiovascular risk reduction, and non-alcoholic fatty liver disease (NAFLD) management. Understanding the multifaceted properties of semaglutide may open new avenues for therapeutic interventions in various metabolic and cardiovascular conditions. By delving into the diverse functions of semaglutide, this research aims to expand our understanding of its therapeutic potential and clinical applications. The findings may contribute to improved treatment strategies for individuals affected by diabetes, obesity, and related metabolic disorders.

Precautions

Semaglutide is for research use only and not for use in diagnostic or therapeutic procedures.

Background

Semaglutide, a glucagon-like peptide-1 receptor agonist (GLP-1 RA), has emerged as a breakthrough in the field of diabetes management and metabolic disorders. It is recognized for its potent glucose-lowering effects, weight management properties, and cardiovascular benefits. Beyond diabetes, semaglutide is under investigation for its potential applications in obesity treatment and other related conditions. This research aims to comprehensively explore semaglutide, shedding light on its multifaceted mechanisms of action and its broader therapeutic implications. The primary objective of this research is to elucidate the mechanisms underlying the glucose-lowering and metabolic effects of semaglutide. In vitro and in vivo experiments will be conducted to investigate how semaglutide interacts with GLP-1 receptors, influences insulin secretion, and modulates glucose homeostasis. Understanding these mechanisms is crucial for harnessing the full therapeutic potential of semaglutide. The second objective is to assess the clinical relevance of semaglutide in diabetes management. Clinical trials involving individuals with type 2 diabetes will be conducted to evaluate the efficacy, safety, and long-term outcomes of semaglutide treatment. These investigations may provide valuable insights into its use as a monotherapy or adjunct therapy in diabetes care. The third objective is to explore the potential applications of semaglutide beyond diabetes. Research will investigate its role in obesity treatment, cardiovascular risk reduction, and non-alcoholic fatty liver disease (NAFLD) management. Understanding the multifaceted properties of semaglutide may open new avenues for therapeutic interventions in various metabolic and cardiovascular conditions. By delving into the diverse functions of semaglutide, this research aims to expand our

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