

## Tirzepatide

Cat. No. CEPP-010

Lot. No. (See product label)

### Introduction

**Description** Tirzepatide is a glucose-dependent dual agonist of the glucagon-independent insulinotropic polypeptide (GIP) receptor and glucagon-like peptide-1 (GLP-1) receptor. GIP and GLP-1 are both natural enteric insulinotropic hormones that promote insulin secretion. Tirzepatide combines the effects of the 2 insulinotropic hormones into a single molecule, a 39 amino acid modified peptide. Tirzepatide contains two unnatural amino acids (aminoisobutyric acid, Aib) at positions 2 and 13, a C-terminal amide, and a Lys residue at position 20, which is attached to 1,20-eicosanedioic acid via a linker.

**Applications** Tirzepatide shares a similar sequence to semaglutide, with the lys side chain of the sequence bearing a PEG modification, which is a functional group of the peptide, as well as the ability to increase the water solubility of the sequence. The primary physiological function of Tirzepatide is that of a dual agonist of glucose-dependent insulinotropic polypeptide (GIP) and glucagon-like peptide-1 (GLP-1) receptor. It is being developed for the treatment of type 2 diabetes mellitus and has entered the clinical phase.

### Product Information

**Appearance** White or off-white powder

**CAS No.** 2023788-19-2

**Molecular Formula** C225H348N48O68

### Usage and Packaging

**Package** 1G/Bottle, 10G/Bottle, 50G/Bottle or at customers requirement.

### Storage and Shipping Information

**Storage** -20°C