

Placental Lactogen, human recombinant (rHuPL)

Catalog No: 97270 Lot No: XXXXX Source: *E. coli*

Synonyms: Chorionic Somatomammotropin Hormone 1, CSH1, Choriomammotropin, Lactogen, CSH2, PL, CSA,

CSMT, FLJ75407

Background

Placental Lactogen is a polypeptide hormone that is produced by the Syncytiotrophoblasts of the Placenta, also known as chorionic somatomammotropin. It has both Growth Hormone and Prolactin activities on growth, lactation, and luteal steroid production. In women, placental lactogen secretion begins soon after implantation and increases to 1 g or more a day in late pregnancy. Placental lactogen is also an insulin antagonist. Placental Lactogen Bovine is also capable of activating human and other heterologous GH receptors but not ruminat GH receptors.

Description

Placental Lactogen human recombinant produced in *E. coli* is a single polypeptide chain containing 199 amino acids and an additional Ala at the N-terminus having a molecular mass of approximately 22.4 kDa. Placental Lactogen is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

The protein was lyophilized from a concentrated (1 mg/ml) solution with 0.02-0.03% NaHCO₃.

Solubility

It is recommended to reconstitute the lyophilized Placental Lactogen in sterile water or 0.4% NaHCO₃ adjusted to pH 8-9, not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions, preferably in presence of carrier protein.

Stability

Lyophilized Placental Lactogen, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Placental Lactogen 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 99.0% as determined by (a) Analysis by Gel Filtration, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

The sequence of the first six N-terminal amino acids was determined and was found to be Ala-Val-Gln-Thr-Val-Pro.

Activity

Placental Lactogen human is biologically active as evidenced by inducing proliferation of Nb2 cells.





Usage

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