

Recombinant Human Placental Lactogen (rh PL)

Synonyms: Chorionic Somatomammotropin Hormone 1, CSH1, Choriomammotropin, Lactogen, CSA, CSMT.

Introduction: 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. Bovine Placental Lactogen is also capable of activating human and other heterologous GH receptors but not ruminant GH receptors.

Description: Recombinant human Placental Lactogen 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 Recombinant is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a concentrated solution with 0.02-0.03% NaHCO₃.
The aliquots/samples of 1µg contain Trehalose 5% (w/vol) for better recovery

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 100µg/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 Gel-Filtration and 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.

Biological Activity : Placental Lactogen Human is biologically active as evidenced by inducing proliferation of Nb2 cells.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	10 µg	Cat.N°	11344363
<i>medium</i>	50 µg	Cat.N°	11344365

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