

Recombinant Human Placental Lactogen/CSH1 Protein

Catalog Number: ATGP3948

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

27-217aa

UniProt No.

P0DML2

NCBI Accession No.

NP_001308

Alternative Names

chorionic somatomammotropin hormone 1 precursor, chorionic somatomammotropin A, choriomammotropin, placental lactogen, PL, chorionic somatomammotropin-1, Lactogen, CS-1, CSA, CSMT, CHB3, hcs-1, hcs-A, CSH1

PRODUCT SPECIFICATION

Molecular Weight

23.1kDa (197aa)

Concentration

0.25mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 30% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured in a cell proliferation assay using Nb2-11 Rat lymphoma cells. The ED50 range \leq 0.8 ng/ml.

Tag

His-Tag

Application

SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Recombinant Human Placental Lactogen/CSH1 Protein

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Description

CSH1, also known as placental lactogen, is a member of the PRL/GH family. CSH1 gene is located on chromosome 17q which participates in the regulation of postnatal and intrauterine growth. This protein is produced only during pregnancy and plays important role in increase of pancreatic islets. It also inhibits apoptosis of insulinoma cell lines by activating the phosphorylation of AKT protein. CSH1 activates PRLR through zinc-induced dimerization but does not interact with GHR. Recombinant human CSH1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

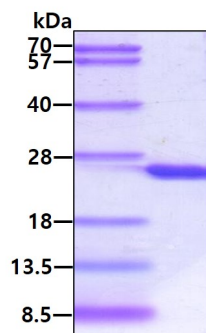
VQTVPLSRLF DHAMLQAHRA HQLAIDTYQE FEETYIPKDQ KYSFLHDSQT SFCFSDSIPT PSNMEETQQK SNLELLRISL LLIESWLPEV RFLRSMFANN LVDYDSDSD YHLLKDLEEG IQTLMGRLED GSRRTGQILK QTYSKFDTNS HNHDAALLKNY GLLYCFRKDM DKVETFLRMV QCRSVEGSCG F<HHHHHH>

General References

- Prager S., et al, (2003) Genet Test. 7:259-263.
- Uemura S, et al, (2007) J Biol Chem. 282:8613-8621.
- Awonuga AO, et al, (2011) Mol Reprod Dev. 78:519-528.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain

Biological Activity

Human CSH1 stimulates cell proliferation of the Nb2-11 Rat lymphoma cells. The ED50 range ≤ 0.8 ng/ml.

