

# **Product datasheet for SC112456**

### OriGene Technologies, Inc.

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## Placental lactogen (CSH1) (NM\_022640) Human Untagged Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Placental lactogen (CSH1) (NM\_022640) Human Untagged Clone

Tag: Tag Free

Symbol: Placental lactogen

Synonyms: CSA; CSH2; CSMT; FLJ75407; PL

Mammalian Cell

None

Selection: Vector:

pCMV6-XL4

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM\_022640, the custom clone sequence may differ by one or more

nucleotides





5' Read Nucleotide Sequence: >OriGene 5' read for NM\_022640 unedited

TCAAGACTACGGNCTGCTCTACTGCTTNCAGAAG

Restriction Sites: Notl-Notl
ACCN: NM\_022640
Insert Size: 4700 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from

the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 022640.2</u>, <u>NP 072166.1</u>

RefSeq Size: 1132 bp
RefSeq ORF: 771 bp
Locus ID: 1442
Cytogenetics: 17q23.3

**Protein Families:** Druggable Genome

**Protein Pathways:** Jak-STAT signaling pathway, Neuroactive ligand-receptor interaction





### **Gene Summary:**

The protein encoded by this gene is a member of the somatotropin/prolactin family of hormones and plays an important role in growth control. The gene is located at the growth hormone locus on chromosome 17 along with four other related genes in the same transcriptional orientation; an arrangement which is thought to have evolved by a series of gene duplications. Although the five genes share a remarkably high degree of sequence identity, they are expressed selectively in different tissues. Alternative splicing generates additional isoforms of each of the five growth hormones, leading to further diversity and potential for specialization. This particular family member is expressed mainly in the placenta and utilizes multiple transcription initiation sites. Expression of the identical mature proteins for chorionic somatomammotropin hormones 1 and 2 is upregulated during development, although the ratio of 1 to 2 increases by term. Mutations in this gene result in placental lactogen deficiency and Silver-Russell syndrome. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (2) contains intron D and encodes the longest isoform (2) which diverges from all other CS isoforms in the carboxy-terminus due to a frameshift. Isoform 2 has a putative transmembrane domain, suggesting a non-secreted product.