

## Active Recombinant Human CSH1 Protein, His-tagged

Cat. No. CSH1-037H Lot. No. (See product label)

### SPECIFICATION

#### Product Overview

Recombinant human CSH1, fused to His-tag at Cterminus, was expressed in insect cell and purified by using conventional chromatography techniques.

#### Species

Human

#### Source

Insect cells

#### Description

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.

#### Form

Liquid

#### Bio-activity

Measured in a cell proliferation assay using Nb2-11 Rat lymphoma cells. The ED50

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	range ≤ 0.8 ng/mL.
<b>Molecular Mass</b>	23.1 kDa
<b>AA Sequence</b>	VQTVPLSRLFDHAMLQAHRAHQLAIDTYQEFEEYIPKDQKYSFLHDSQTSFCFSDSI PTPSNMEETQQKSNLELLRISLLIESWLEPVRFLRSMFANNLVYDTSDSDDYHLLKD LEEGIQTLMGRLEDGSRRTGQILKQTYSKFDTNSHNHDALLKNYGLLYCFRKDMDK VETFLRMVQCRSVEGSCGF
<b>Endotoxin</b>	< 1 EU/μg of protein (determined by LAL method)
<b>Purity</b>	> 90% by SDS-PAGE
<b>Applications</b>	SDS-PAGE, Bioactivity
<b>Storage</b>	Can be stored at +2 to +8 centigrade for 1 week. For long term storage, aliquot and store at -20 to -116 centigrade. Avoid repeated freezing and thawing cycles.
<b>Concentration</b>	0.25 mg/mL (determined by Absorbance at 280nm)
<b>Storage Buffer</b>	Phosphate-Buffered Saline (pH 7.4) containing 30% glycerol
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	CSH1 chorionic somatomammotropin hormone 1 [ Homo sapiens (human) ]
<b>Official Symbol</b>	CSH1
<b>Synonyms</b>	CSH1; chorionic somatomammotropin hormone 1; PL; CSA; CS-1; CSMT; GHB3; hCS-1; hCS-A; chorionic somatomammotropin hormone 1; Chorionic somatomammotropin hormone 2; choriomammotropin; chorionic

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somatomammotropin A; chorionic somatomammotropin-1; growth hormone B3;  
placental lactogen

**Gene ID** 1442

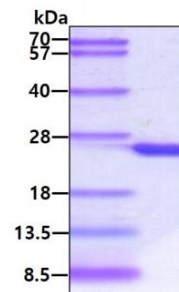
**mRNA Refseq** NM\_001317

**Protein Refseq** NP\_001308

**MIM** 150200

**UniProt ID** P0DML2

**SDS-PAGE**



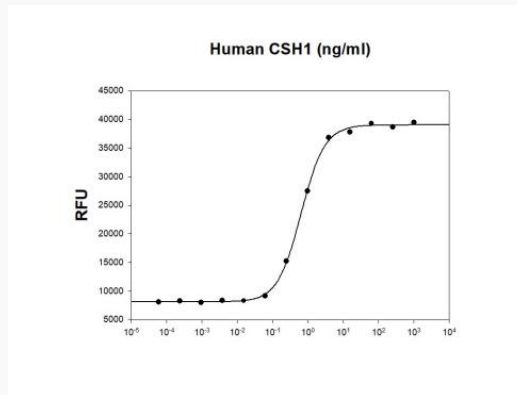
3 µg by SDS-PAGE under reducing condition and visualized by coomassie blue stain

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**Biological Activity**



Human CSH1 stimulates cell proliferation of the Nb2-11 Rat lymphoma cells. The ED50 range  $\leq 0.8$  ng/mL.

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