

## Product datasheet for RC223244

### Placental lactogen (CSH1) (NM\_022640) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Placental lactogen (CSH1) (NM_022640) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Placental lactogen
Synonyms:	CSA; CSH2; CSMT; FLJ75407; PL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<p>&gt;RC223244 representing NM_022640</p> <p>Red=Cloning site Blue=ORF Green=Tags(s)</p>

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGGCTCCAGGCTCCCGGACGTCCTGCTCCTGGCTTTTGCCCTGCTCTGCCTGCCCTGGCTTCAAGAGG  
 CTGGTGCCGTCCAAACCGTTCCGTTATCCAGGCTTTTGACCACGCTATGCTCCAAGCCCATCGCGCGCA  
 CCAGCTGGCCATTGACACCTACCAGGAGTTTGAAGAACTATATCCAAAGGACCAGAAGTATTCATT  
 CTGCATGACTCCAGACCTCCTTCTGCTTCTCAGACTCTATTCCGACACCCTCCAACATGGAGGAAACGC  
 AACAGAAATCCAATCTAGAGCTGCTCCGCATCTCCCTGCTGCTCATCGAGTCGTGGCTGGAGCCCGTGCG  
 GTTCCTCAGGAGTATGTTCCGCAACAACCTGGTGTATGACACCTCGGACAGCGATGACTATCACCTCCTA  
 AAGGACCTAGAGGAAGGCATCCAAACGCTGATGGGGGTGAGGGTGGCGCCAGGGGTACCAATCCTGGAA  
 CCCCCTGGCTTCGAGGGCTGGGGGAGAGAAATACTGCTGCCCTCTTTTACAGTAAGGCGCTGACCCA  
 AGAGAACTCACCTTATTCTTCAATTCGCTGGTGAATCCTCCAGGCCCTTCTCTACACCTGAAGGGGAG  
 GGAGGAAAATGGATAAATGAGAGAGGGAGGGAACAGTGCCCAAGCGCTTGGCCTCTCCTTCTTCTCCTTC  
 ACTTTCAGAGGCTGGAAGACGGCAGCCGCCGACTGGGCAGATCCTCAAGCAGACCTACAGCAAGTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA


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**Protein Sequence:** >RC223244 representing NM\_022640  
 Red=Cloning site Green=Tags(s)

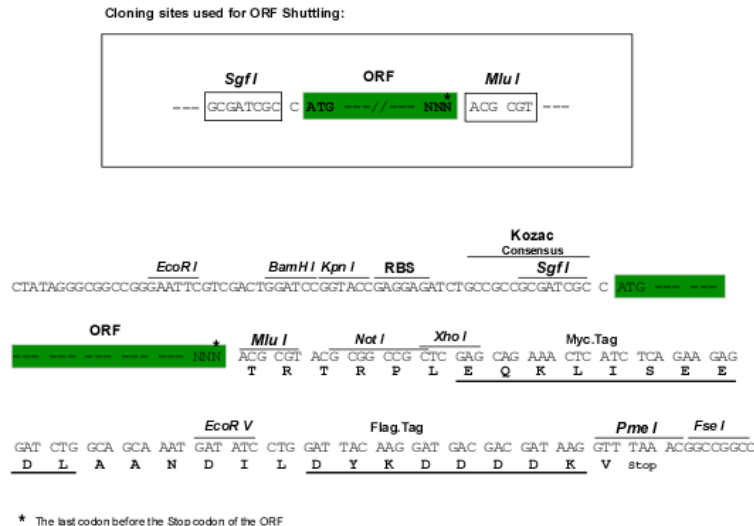
MAPGSRTSLLAFALLCLPWLQEAGAVQTVPLSRLFDHAMLQAHRAHQLAIDTYQEFEETYIPKDQKYSF  
 LHDSQTSFCFSDSIPTPSNMEETQQKSNELELLRISLLLIESWLEPVRFRLSMFANNLVYDTSDDDYHLL  
 KDLEEGIQTLMGVRVAPGVTPNPGTPLASRAGGEKYCCPLFSSKALTQENSPYSSFRLVNPPGLSLHPEGE  
 GGKWINERGREQPSAWPLLLFLHFAEAGRQPPDWADPQADLQQV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6491\\_e10.zip](https://cdn.origene.com/chromatograms/mk6491_e10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_022640

**ORF Size:** 768 bp

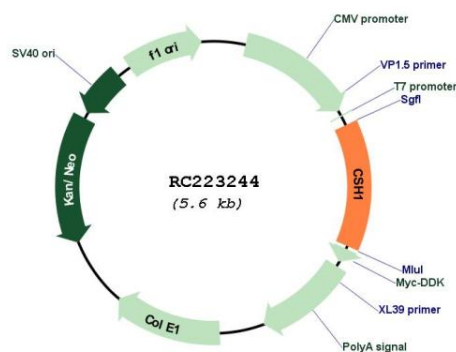
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

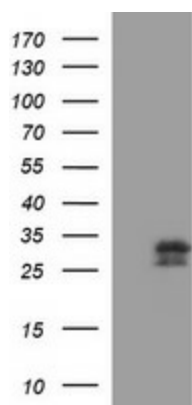
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u>NM_022640.3</u>
<b>RefSeq Size:</b>	1132 bp
<b>RefSeq ORF:</b>	770 bp
<b>Locus ID:</b>	1442
<b>Cytogenetics:</b>	17q23.3
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Jak-STAT signaling pathway, Neuroactive ligand-receptor interaction
<b>MW:</b>	28.6 kDa
<b>Gene Summary:</b>	<p>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]</p>

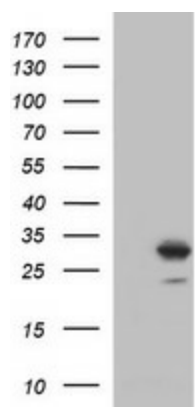
## Product images:



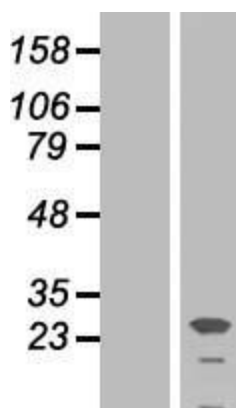
Circular map for RC223244



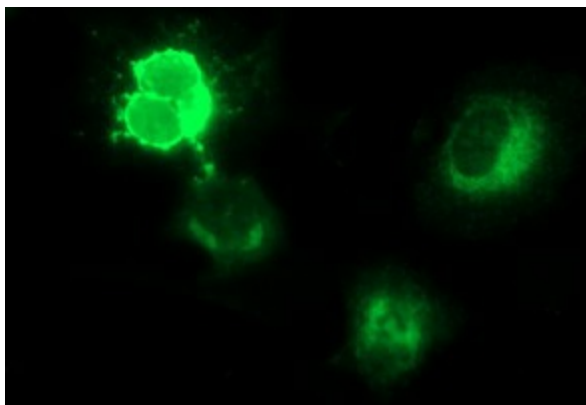
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CSH1 (RC223244, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CSH1 ([TA506814]). Positive lysates [LY411615] (100ug) and [LC411615] (20ug) can be purchased separately from OriGene.



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CSH1 (Cat# RC223244, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CSH1 (Cat# [TA506708]). Positive lysates [LY411615] (100ug) and [LC411615] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY411615]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223244 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Anti-CSH1 mouse monoclonal antibody ([TA506814]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY CSH1 (RC223244).