

Product datasheet for RC219345

Placental lactogen (CSH2) (NM_022644) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Placental lactogen (CSH2) (NM_022644) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Placental lactogen
Synonyms: CS-2; CSB; GHB1; hCS-B; PL
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC219345 representing NM_022644
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTGCAGGCTCCCGGACGTCCTGCTCCTGGCTTTTGCCCTGCTCTGCCTGCCCTGGCTTCAAGAGG
 CTGGTGCCGTCAAACCGTTCCGTTATCCAGGCTTTTGGACCACGCTATGCTCCAAGCCATCGCGCGCA
 CCAGCTGGCCATTGACACCTACCAGGAGTTGAAGAACTATATCCCAAAGGACCAGAAGTATTCATTC
 CTGCATGACTCCAGACCTCCTTCTGCTTCTCAGACTCTATTCCGACACCCTCAAACATGGAGGAAACGC
 AACAGAAATCCAATCTAGAGCTGCTCCGCATCTCCTGCTGCTCATCGAGTCGTGGCTGGAGCCCGTGCG
 GTTCTCAGGAGTATGTTGCGCAACAACCTGGTGTATGACACCTCGGACAGCGATGACTATCACCTCCTA
 AAGGACCTAGAGGAAGGCATCAAACGCTGATGGGGGTGAGGGTGGCGCCAGGGTCCACCAATCCTGGAA
 CCCACTGGCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC219345 representing NM_022644
 Red=Cloning site Green=Tags(s)
 MAAGSRTSLLLAFALLCLPWLQEAGAVQTVPLSRLFDHAMLQAHRAHQLAIDTYQEFEETYIPKDQKYSF
 LHDSQTSFCFSDSIPTPSNMEETQQKSNLELLRISLLLIESWLEPVRFLRSMFANNLVYDTSDDDYHLL
 KDLEEGIQTLMGVRVAPGVTPNGTPLA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6102_h05.zip



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_022644

ORF Size: 501 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).

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: [NM_022644.3](#)

RefSeq Size: 1134 bp

RefSeq ORF: 504 bp

Locus ID: 1443

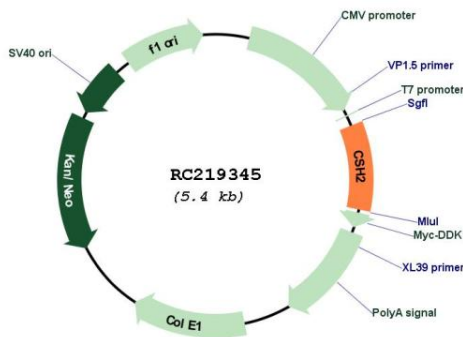
Cytogenetics: 17q23.3

Protein Families: Secreted Protein

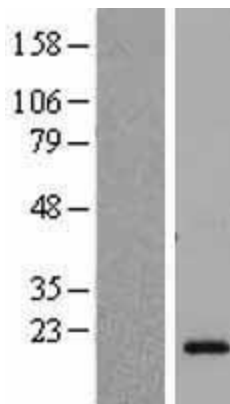
MW: 18.6 kDa

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. 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, while the ratio of 1 to 2 increases by term. Structural and expression differences provide avenues for developmental regulation and tissue specificity. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC219345



Western blot validation of overexpression lysate (Cat# [LY411617]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219345 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).