

Product datasheet for RC210818

LIF (NM_002309) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: LIF (NM_002309) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: LIF
Synonyms: CDF; DIA; HILDA; MLPLI
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC210818 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAGGCTTGGCGGCAGGAGTTGTGCCCTGCTGTTGGTTCTGCACTGGAAACATGGGGCGGGGAGCC
 CCCTCCCCATACCCCTGTCAACGCCACCTGTGCCATACGCCACCCATGCACAACAACCTCATGAACCA
 GATCAGGAGCCAACTGGCACAGCTCAATGGCAGTGCCATGCCCTCTTTATTCTCTATTACAGCCAG
 GGGGAGCCGTTCCCAACAACCTGGACAAGCTATGTGGCCCAACGTGACGGACTTCCGCCCTTCCAGC
 CCAACGGCACGGAGAAGGCAAGCTGGTGGAGCTGTACCGCATAGTCGTGTACCTGGCACCTCCCTGGG
 CAACATCACCCGGGACCAGAAGATCCTCAACCCAGTGCCTCAGCCTCCACAGCAAGCTCAACGCCACC
 GCCGACATCCTGCGAGGCCTCCTTAGCAACGTGCTGTGCCGCTGTGCAGCAAGTACCACGTGGGCCATG
 TGGACGTGACCTACGGCCCTGACACCTCGGTAAGGATGTCTTCCAGAAGAAGAAGCTGGGCTGTCAACT
 CCTGGGGAAGTATAAGCAGATCATCGCCGTGTTGGCCAGGCCTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC210818 protein sequence
 Red=Cloning site Green=Tags(s)

MKVLAAGVPLLLVLHWKHGAGSPLPITPVNATCAIRHPCHNNLMNQIRSQLAQLNGSANALFILYYTAQ
 GEPFPNNLDKLCGPNVDFPPFHANGTEKAKLVELYRIVVYLGTSLGNITRDQKILNPSALSLSKLNAT
 ADILRGLLSNVL CRLCSKYHVGHVDVTYGPDTS GKDFVQKKKLG CQLLGKYKQIIAVLAQAF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Chromatograms: https://cdn.origene.com/chromatograms/mk6192_h09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002309

ORF Size: 606 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_002309.5](#)

RefSeq Size: 3987 bp

RefSeq ORF: 609 bp

Locus ID: 3976

UniProt ID: [P15018](#)

Cytogenetics: 22q12.2

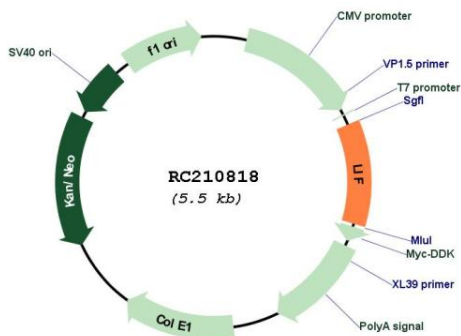
Protein Families: Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein

Protein Pathways: Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway

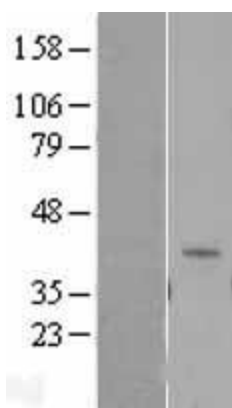
MW: 22 kDa

Gene Summary: The protein encoded by this gene is a pleiotropic cytokine with roles in several different systems. It is involved in the induction of hematopoietic differentiation in normal and myeloid leukemia cells, induction of neuronal cell differentiation, regulator of mesenchymal to epithelial conversion during kidney development, and may also have a role in immune tolerance at the maternal-fetal interface. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Mar 2012]

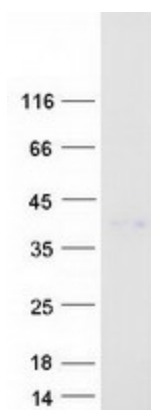
Product images:



Circular map for RC210818



Western blot validation of overexpression lysate (Cat# [LY400835]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210818 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LIF protein (Cat# [TP310818]). The protein was produced from HEK293T cells transfected with LIF cDNA clone (Cat# RC210818) using MegaTran 2.0 (Cat# [TT210002]).