

Product datasheet for RC216785

IL10 (NM_000572) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: IL10 (NM_000572) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: IL10
Synonyms: CSIF; GVHDS; IL-10; IL10A; TGIF
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC216785 representing NM_000572
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGCACAGCTCAGCACTGCTCTGTTGCCTGGTCTCTGACTGGGGTGAGGGCCAGCCCAGGCCAGGGCA
 CCCAGTCTGAGAACAGCTGCACCACTTCCCAGGCAACCTGCCTAACATGCTTCGAGATCTCCGAGATGC
 CTTGAGCAGAGTGAAGACTTTCTTTCAAATGAAGGATCAGCTGGACAACCTGTTGTTAAAGGAGTCCTTG
 CTGGAGGACTTTAAGGGTTACCTGGGTTGCCAAGCCTTGCTGAGATGATCCAGTTTACCTGGAGGAGG
 TGATGCCCAAGCTGAGAACCAAGACCCAGACATCAAGGCGCATGTGAACCCCTGGGGGAGAACCTGAA
 GACCCTCAGGCTGAGGCTACGGCGCTGTCATCGATTTCTCCCTGTGAAAACAAGAGCAAGGCCGTGGAG
 CAGGTGAAGAATGCCTTTAATAAGCTCCAAGAGAAAGGCATCTACAAAGCCATGAGTGAGTTTGACATCT
 TCATCAACTACATAGAAGCCTACATGACAATGAAGATACGAAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216785 representing NM_000572
 Red=Cloning site Green=Tags(s)

MHSSALLCCLVLLTGVRASPGQGTQSENSCTHFPGNLPNMLRDLRDAFSRVKTFQMKDQLDNLKESL
 LEDFKGYLGCQALSEMIQFYLEEVMQAENQDPDIKAHVNSLGENLKLRLRLRCHRFLPCENKSKAVE
 QVKNAFNKLQEKGIYKAMSEFDIFINYIEAYMTMKIRN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6100_b01.zip



View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000572

ORF Size: 534 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.

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

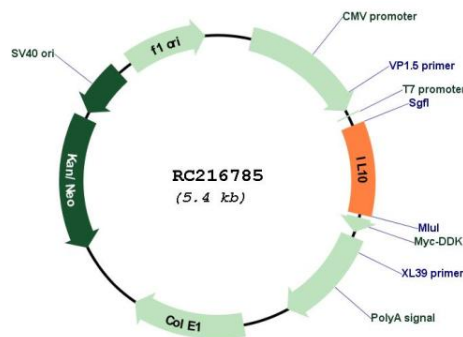
RefSeq: [NM_000572.3](#)

RefSeq Size: 1629 bp

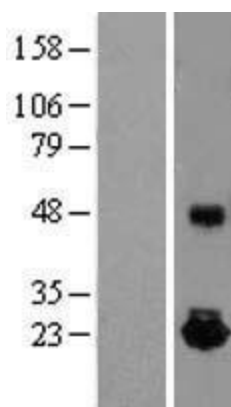
RefSeq ORF: 537 bp

Locus ID:	3586
UniProt ID:	P22301
Cytogenetics:	1q32.1
Domains:	IL10
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein
Protein Pathways:	Allograft rejection, Asthma, Autoimmune thyroid disease, Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway, Systemic lupus erythematosus, T cell receptor signaling pathway
MW:	20.52 kDa
Gene Summary:	The protein encoded by this gene is a cytokine produced primarily by monocytes and to a lesser extent by lymphocytes. This cytokine has pleiotropic effects in immunoregulation and inflammation. It down-regulates the expression of Th1 cytokines, MHC class II Ags, and costimulatory molecules on macrophages. It also enhances B cell survival, proliferation, and antibody production. This cytokine can block NF-kappa B activity, and is involved in the regulation of the JAK-STAT signaling pathway. Knockout studies in mice suggested the function of this cytokine as an essential immunoregulator in the intestinal tract. Mutations in this gene are associated with an increased susceptibility to HIV-1 infection and rheumatoid arthritis. [provided by RefSeq, May 2020]

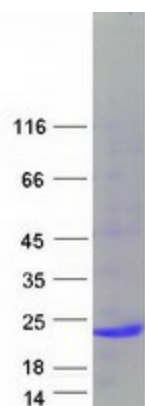
Product images:



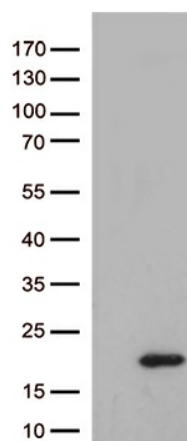
Circular map for RC216785



Western blot validation of overexpression lysate (Cat# [LY424633]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216785 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified IL10 protein (Cat# [TP316785]). The protein was produced from HEK293T cells transfected with IL10 cDNA clone (Cat# RC216785) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY IL10 (Cat# RC216785, 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-IL10 (Cat# [TA813305])(1:500).