

## 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)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCACAGCTCAGCACTGCTCTGTTGCCTGGTCTCTGACTGGGGTGAGGGCCAGCCAGGCCAGGGCA  
 CCCAGTCTGAGAACAGCTGCACCCACTTCCAGGCAACCTGCCTAACATGCTTCGAGATCTCCGAGATGC  
 CTTCAGCAGAGTGAAGACTTTCTTTCAAATGAAGGATCAGCTGGACAACCTGTTGTTAAAGGAGTCTTG  
 CTGGAGGACTTTAAGGGTTACCTGGGTTGCCAAGCCTTGCTGAGATGATCCAGTTTTACCTGGAGGAG  
 TGATGCCCAAGCTGAGAACCAAGACCCAGACATCAAGGCGCATGTGAACCTCCCTGGGGGAGAACCTGAA  
 GACCCTCAGGCTGAGGCTACGGCGCTGTCATCGATTTCTCCCTGTGAAAACAAGAGCAAGCCGTGGAG  
 CAGGTGAAGAATGCCTTTAATAAGCTCCAAGAGAAAGGCATCTACAAAGCCATGAGTGAGTTTGACATCT  
 TCATCAACTACATAGAAGCCTACATGACAATGAAGATACGAAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC216785 representing NM\_000572  
 Red=Cloning site Green=Tags(s)

MHSSALLCCLVLLTGVRASPGQGTQSENSCTHFPGNLPNMLRDLRDAFSRVKTFQMKDQLDNLLKESL  
 LEDFKGYLGCQALSEMIQFYLEEVMQAENQDPDIKAHVNSLGENLKTLRLRRLRCHRFLPCENKSKAVE  
 QVKNAFNKLQEKGIYKAMSEFDIFINYIEAYMTMKIRN

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

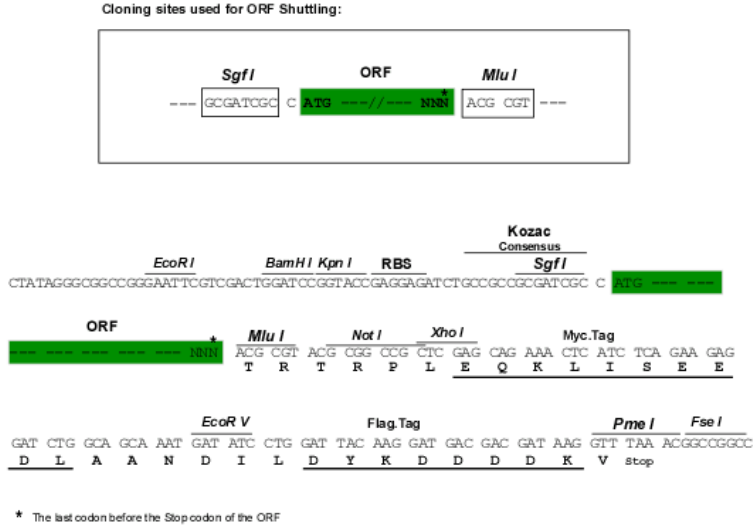
**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6100\\_b01.zip](https://cdn.origene.com/chromatograms/mk6100_b01.zip)



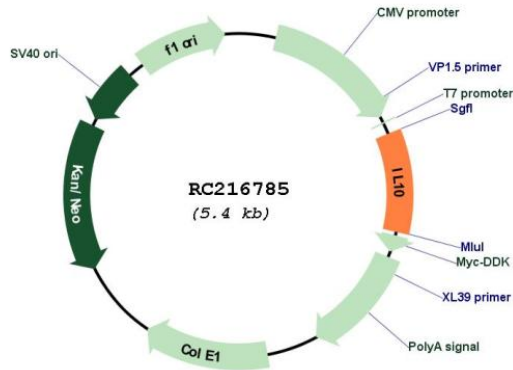
[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



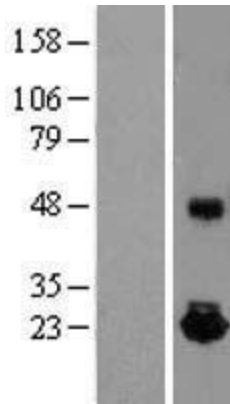
ACCN: NM\_000572

ORF Size: 534 bp

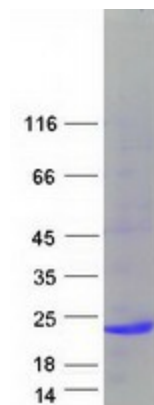
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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>RefSeq:</b>	<a href="#">NM_000572.3</a>
<b>RefSeq Size:</b>	1629 bp
<b>RefSeq ORF:</b>	537 bp
<b>Locus ID:</b>	3586
<b>UniProt ID:</b>	<a href="#">P22301</a>
<b>Cytogenetics:</b>	1q32.1
<b>Domains:</b>	IL10
<b>Protein Families:</b>	Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein
<b>Protein Pathways:</b>	Allograft rejection, Asthma, Autoimmune thyroid disease, Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway, Systemic lupus erythematosus, T cell receptor signaling pathway
<b>MW:</b>	20.52 kDa

**Gene Summary:**

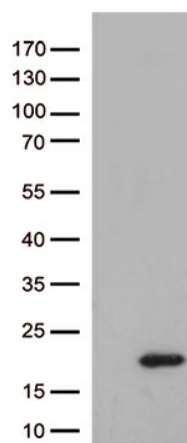
The protein encoded by this gene is a cytokine produced primarily by monocytes and to a lesser extent by lymphocytes. This cytokine has pleiotropic effects in immunoregulation and inflammation. It down-regulates the expression of Th1 cytokines, MHC class II Ags, and costimulatory molecules on macrophages. 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:**


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).