

## Product datasheet for **RG216785**

### IL10 (NM\_000572) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** IL10 (NM\_000572) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** IL10  
**Synonyms:** CSIF; GVHDS; IL-10; IL10A; TGIF  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG216785 representing NM\_000572  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCACAGCTCAGCACTGCTCTGTTGCCTGGTCTCTGACTGGGGTGAGGGCCAGCCAGGCCAGGGCA  
 CCCAGTCTGAGAACAGCTGCACCCACTTCCAGGCAACCTGCCTAACATGCTTCGAGATCTCCGAGATGC  
 CTTCAGCAGAGTGAAGACTTTCTTTCAAATGAAGGATCAGCTGGACAACCTGTTGTTAAAGGAGTCTTG  
 CTGGAGGACTTTAAGGGTTACCTGGGTTGCCAAGCCTTGTCTGAGATGATCCAGTTTTACCTGGAGGAGG  
 TGATGCCCAAGCTGAGAACCAAGACCCAGACATCAAGGCGCATGTGAACCTCCCTGGGGGAGAACCTGAA  
 GACCCTCAGGCTGAGGCTACGGCGCTGTCATCGATTTCTCCCTGTGAAAACAAGAGCAAGCCGTGGAG  
 CAGGTGAAGAATGCCTTTAATAAGCTCCAAGAGAAAGGCATCTACAAAGCCATGAGTGAGTTTGACATCT  
 TCATCAACTACATAGAAGCCTACATGACAATGAAGATACGAAAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG216785 representing NM\_000572  
 Red=Cloning site Green=Tags(s)

MHSSALLCCLVLLTGVRASPGQGTQSENSCTHFGNLPNMLRDLRDAFSRVKTFQMKDQLDNLLKESL  
 LEDFKGYLGCQALSEMIQFYLEEVPQAENQDPDIKAHVNSLGENLKTLRLRRLRCHRFLPCENKSKAVE  
 QVKNAFNKLQEKGIYKAMSEFDIFINYIEAYMTMKIRN

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** NM\_000572

**ORF Size:** 534 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](mailto: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).

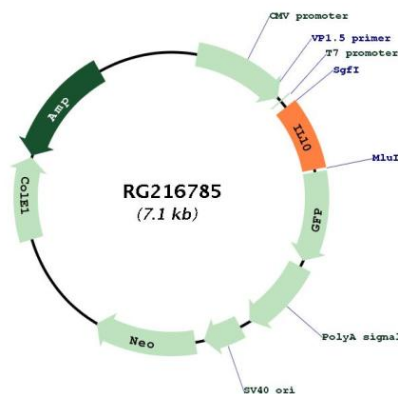
**Reconstitution Method:**

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.

RefSeq:	<a href="#">NM_000572.3</a>
RefSeq Size:	1629 bp
RefSeq ORF:	537 bp
Locus ID:	3586
UniProt ID:	<a href="#">P22301</a>
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

**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 RG216785