

Product datasheet for **RG210013**

IL2 (NM_000586) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: IL2 (NM_000586) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: IL2
Synonyms: IL-2; lymphokine; TCGF
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG210013 representing NM_000586
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTACAGGATGCAACTCCTGTCTTGCATTGCACTAAGTCTTGCCTTGTACAAACAGTGCACCTACTT
 CAAGTTCTACAAAGAAAACACAGCTACAACCTGGAGCATTTACTGCTGGATTTACAGATGATTTTGAATGG
 AATTAATAATTACAAGAATCCCAAACCTACCAGGATGCTCACATTTAAGTTTTACATGCCAAGAAGGCC
 ACAGAACTGAAACATCTTCAGTGTCTAGAAGAAGAACTCAAACCTCTGGAGGAAGTGCTAAATTTAGCTC
 AAAGCAAAAACCTTCACTTAAGACCCAGGGACTTAATCAGCAATATCAACGTAATAGTTCTGGAATAAA
 GGGATCTGAAACAACATTCATGTGTGAATATGCTGATGAGACAGCAACCATTGTAGAATTTCTGAACAGA
 TGGATTACCTTTTGTCAAAGCATCATCTCAACTGACT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG210013 representing NM_000586
 Red=Cloning site Green=Tags(s)

MYRMQLLSICIALSLALVTNSAPTSSTKKTQLQLEHLLLDLQMILNNGINNYKNPKLTRMLTFKFYMPKKA
 TELKHLQCLEEELKPLEEVLNLAQSKNFHLRPRDLISININIVLELKGSETTFMCEYADETATIVEFLNR
 WITFCQSIISTLT

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_000586

ORF Size: 459 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.

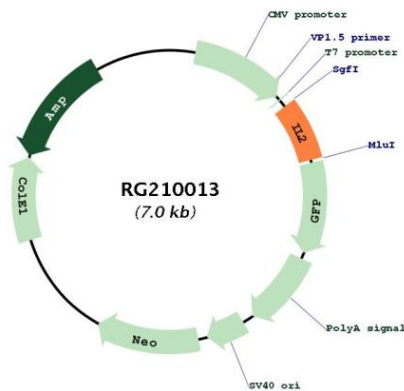
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_000586.4](#)

RefSeq Size: 1047 bp

RefSeq ORF: 462 bp

Locus ID: 3558
UniProt ID: [P60568](#)
Cytogenetics: 4q27
Protein Families: Druggable Genome, Secreted Protein
Protein Pathways: Allograft rejection, Autoimmune thyroid disease, Cytokine-cytokine receptor interaction, Graft-versus-host disease, Jak-STAT signaling pathway, T cell receptor signaling pathway, Type I diabetes mellitus
Gene Summary: This gene is a member of the interleukin 2 (IL2) cytokine subfamily which includes IL4, IL7, IL9, IL15, IL21, erythropoietin, and thrombopoietin. The protein encoded by this gene is a secreted cytokine produced by activated CD4+ and CD8+ T lymphocytes, that is important for the proliferation of T and B lymphocytes. The receptor of this cytokine (IL2R) is a heterotrimeric protein complex whose gamma chain is also shared by IL4 and IL7. The expression of this gene in mature thymocytes is monoallelic, which represents an unusual regulatory mode for controlling the precise expression of a single gene. The targeted disruption of a similar gene in mice leads to ulcerative colitis-like disease, which suggests an essential role of this gene in the immune response to antigenic stimuli. [provided by RefSeq, Sep 2020]

Product images:


Circular map for RG210013