

## **Product datasheet for RG218057**

## IL17 (IL17A) (NM 002190) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: IL17 (IL17A) (NM\_002190) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: IL17

Synonyms: CTLA-8; CTLA8; IL-17; IL-17A; IL17; ILA17

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG218057 representing NM\_002190

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGACTCCTGGGAAGACCTCATTGGTATCACTGCTACTGCTGCTGAGCCTGGAGGCCATAGTGAAGGCAG
GAATCACAATCCCACGAAATCCAGGATGCCCAAAATTCTGAGGACAAGAACTTCCCCCGGACTGTGATGGT
CAACCTGAACATCCATAACCGGAATACCAATACCAATCCCAAAAGGTCCTCAGATTACTACAACCGATCC
ACCTCACCTTGGAATCTCCACCGCAATGAGGACCCTGAGAGATATCCCTCTGTGATCTGGGAGGCAAAGT
GCCGCCACTTGGGCTGCATCAACGCTGATGGGAACGTGGACTACCACATGAACTCTGTCCCCATCCAGCA
AGAGATCCTGGTCCTGCGCAGGGAGCCTCCACACTGCCCCAACTCCTTCCGGCTGGAGAAAGATACTGGTG

TCCGTGGGCTGCACCTGTGTCACCCCGATTGTCCACCATGTGGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG218057 representing NM\_002190

Red=Cloning site Green=Tags(s)

MTPGKTSLVSLLLLLSLEAIVKAGITIPRNPGCPNSEDKNFPRTVMVNLNIHNRNTNTNPKRSSDYYNRS TSPWNLHRNEDPERYPSVIWEAKCRHLGCINADGNVDYHMNSVPIQQEILVLRREPPHCPNSFRLEKILV

SVGCTCVTPIVHHVA

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul



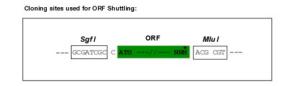
**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

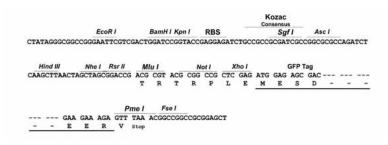
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



## **Cloning Scheme:**





**ACCN:** NM\_002190

ORF Size: 465 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.

**RefSeg:** NM 002190.2, NP 002181.1

 RefSeq Size:
 1859 bp

 RefSeq ORF:
 468 bp

 Locus ID:
 3605

 UniProt ID:
 Q16552



Cytogenetics: 6p12.2

**Protein Families:** Druggable Genome, Secreted Protein **Protein Pathways:** Cytokine-cytokine receptor interaction

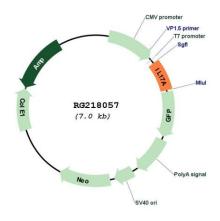
This gene is a member of the IL-17 receptor family which includes five members (IL-17RA-E) **Gene Summary:** 

> and the encoded protein is a proinflammatory cytokine produced by activated T cells. IL-17Amediated downstream pathways induce the production of inflammatory molecules, chemokines, antimicrobial peptides, and remodeling proteins. The encoded protein elicits crucial impacts on host defense, cell trafficking, immune modulation, and tissue repair, with a

key role in the induction of innate immune defenses. This cytokine stimulates non-

hematopoietic cells and promotes chemokine production thereby attracting myeloid cells to inflammatory sites. This cytokine also regulates the activities of NF-kappaB and mitogenactivated protein kinases and can stimulate the expression of IL6 and cyclooxygenase-2 (PTGS2/COX-2), as well as enhance the production of nitric oxide (NO). IL-17A plays a pivotal role in various infectious diseases, inflammatory and autoimmune disorders, and cancer. High levels of this cytokine are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis and multiple sclerosis. The lung damage induced by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is to a large extent, a result of the inflammatory response promoted by cytokines such as IL17A. [provided by RefSeq, Sep 2020]

## **Product images:**



Circular map for RG218057