

## Product datasheet for **SC333305**

### IL15 (NM\_172175) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	IL15 (NM_172175) Human Untagged Clone
Tag:	Tag Free
Symbol:	IL15
Synonyms:	IL-15
Mammalian Cell Selection:	Neomycin
Vector:	<u>PCMV6-Neo</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_172175, the custom clone sequence may differ by one or more nucleotides

```
ATGGTATTGGAACCATAGATTTGTGCAGCTGTTTCAGTGCAGGGCTTCCTAAAACAGAAGCCAAGTGGG  
TGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTTATTCAATCTATGCATATTGATGCTACTTTATA  
TACGAAAGTGATGTTACCCCGAGTTCAGAAAGTAAACAGCAATGAAGTGCTTTCTCTGGAGTTACAAGTT  
ATTTCACTTGAGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAACA  
GTTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAGAATGTGAGGAAGTGGAGGAAAAAATAT  
TAAAGAATTTTGCAGAGTTTGTACATATTGTCCAAATGTTTCATCAACACTTCTTGA
```

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_172175



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**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](#)

**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:** [NM\\_172175.2](#), [NP\\_751915.1](#)

**RefSeq Size:** 2333 bp

**RefSeq ORF:** 408 bp

**Locus ID:** 3600

**UniProt ID:** [P40933](#)

**Cytogenetics:** 4q31.21

**Protein Families:** Druggable Genome, Secreted Protein

**Protein Pathways:** Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway

**Gene Summary:**

The protein encoded by this gene is a cytokine that regulates T and natural killer cell activation and proliferation. This cytokine and interleukine 2 share many biological activities. They are found to bind common hematopoietin receptor subunits, and may compete for the same receptor, and thus negatively regulate each other's activity. The number of CD8+ memory cells is shown to be controlled by a balance between this cytokine and IL2. This cytokine induces the activation of JAK kinases, as well as the phosphorylation and activation of transcription activators STAT3, STAT5, and STAT6. Studies of the mouse counterpart suggested that this cytokine may increase the expression of apoptosis inhibitor BCL2L1/BCL-x(L), possibly through the transcription activation activity of STAT6, and thus prevent apoptosis. Alternatively spliced transcript variants of this gene have been reported. [provided by RefSeq, Feb 2011]

Transcript Variant: This variant (2) differs in the 5' UTR and contains an alternate exon in the 5' coding region. This variant uses an alternate downstream start codon, compared to variant 1. Isoform 2 (also known as (21aa(SSP))-IL15) has a shorter and distinct N-terminus, compared to isoform 1.