

## Product datasheet for **RC209681**

### IL5 (NM\_000879) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** IL5 (NM\_000879) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** IL5  
**Synonyms:** EDF; IL-5; TRF  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC209681 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGGATGCTTCTGCATTTGAGTTTGCTAGCTCTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAA  
TTCCACAAGTGCATTGGTGAAGAGACCTTGGCACTGCTTTCTACTCATCGAACTCTGCTGATAGCCAA  
TGAGACTCTGAGGATTCCTGTTCTGTACATAAAAAATCACCAACTGTGCACTGAAGAAATCTTTCAGGGA  
ATAGGCACACTGGAGAGTCAAAGTGTGCAAGGGGGTACTGTGGAAGACTATTCAAAAATCTGCTTAA  
TAAAGAAATACATTGACGCCAAAAAAAAAAGTGTGGAGAAGAAAGACGGAGAGTAAACCAATTCCTAGA  
CTACCTGCAAGAGTTTCTTGGTGAATGAACACCGAGTGGATAATAGAAAAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC209681 protein sequence  
Red=Cloning site Green=Tags(s)  
MRMLLHLSLLALGAAYVYAIPTSEIPTSALVKETLALLSTHRTLLIANETLRIPVPVHKNHQLCTEEIFQG  
IGTLESQTVQGGTVERLFKNLSLIKKYIDGQKKKCGEERRRVNQFLDYLQEFGLGVMNTEWIIES

**TR**TRPLEQ**KL**ISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6364\\_h09.zip](https://cdn.origene.com/chromatograms/mk6364_h09.zip)

**Restriction Sites:** SgfI-MluI



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**Cloning Scheme:**


**ACCN:** NM\_000879

**ORF Size:** 402 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\\_000879.3](#)

**RefSeq Size:** 816 bp

**RefSeq ORF:** 405 bp

**Locus ID:** 3567  
**UniProt ID:** [P05113](#)  
**Cytogenetics:** 5q31.1

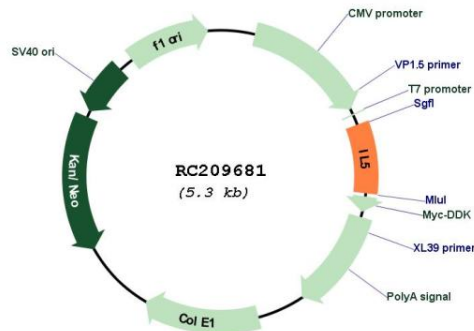
**Protein Families:** Druggable Genome, Secreted Protein

**Protein Pathways:** Allograft rejection, Asthma, Autoimmune thyroid disease, Cytokine-cytokine receptor interaction, Fc epsilon RI signaling pathway, Hematopoietic cell lineage, Jak-STAT signaling pathway, T cell receptor signaling pathway

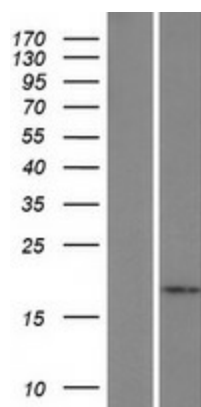
**MW:** 15.2 kDa

**Gene Summary:** This gene encodes a cytokine that acts as a growth and differentiation factor for both B cells and eosinophils. The encoded cytokine plays a major role in the regulation of eosinophil formation, maturation, recruitment and survival. The increased production of this cytokine may be related to pathogenesis of eosinophil-dependent inflammatory diseases. This cytokine functions by binding to its receptor, which is a heterodimer, whose beta subunit is shared with the receptors for interleukin 3 (IL3) and colony stimulating factor 2 (CSF2/GM-CSF). This gene is located on chromosome 5 within a cytokine gene cluster which includes interleukin 4 (IL4), interleukin 13 (IL13), and CSF2. This gene, IL4, and IL13 may be regulated coordinately by long-range regulatory elements spread over 120 kilobases on chromosome 5q31. [provided by RefSeq, Jul 2013]

### Product images:



Circular map for RC209681



Western blot validation of overexpression lysate (Cat# [LY424470]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209681 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).