

Product datasheet for **RC218518**

IL1RA (IL1RN) (NM_173842) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Tag: Myc-DDK
Symbol: IL1RA
Synonyms: DIRA; ICIL-1RA; IL-1ra; IL-1ra3; IL-1RN; IL1F3; IL1RA; IRAP; MVCD4
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC218518 representing NM_173842
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAAATCTGCAGAGGCCTCCGCAGTCACCTAATCACTCTCCTCCTCTTCTGTTCCATTCAGAGACGA
TCTGCCGACCCTCTGGGAGAAAAATCCAGCAAGATGCAAGCCTTCAGAATCTGGGATGTTAACCAGAAGAC
CTTCTATCTGAGGAACAACCACTAGTTGCCGGATACTTGCAAGGACCAATGTCAATTTAGAAGAAAAG
ATAGATGTGGTACCCATTGAGCCTCATGCTCTGTTCTTGGGAATCCATGGAGGGAAGATGTGCCTGTCCT
GTGTCAAGTCTGGTGATGAGACCAGACTCCAGCTGGAGGCAGTTAACATCACTGACCTGAGCGAGAACAG
AAAGCAGGACAAGCGCTTCGCCTTCATCCGCTCAGACAGTGGCCCCACCACCAAGTTTGTAGTCTGCCGCC
TGCCCCGGTTGGTTCTCTGCACAGCGATGGAAGCTGACCAGCCCGTCAGCCTCACCAATATGCCTGACG
AAGGCGTCATGGTCACCAAAATTCTACTCCAGGAGGACGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC218518 representing NM_173842
Red=Cloning site Green=Tags(s)
MEICRGLRSHLITLLLFLFHSETICRPSGRKSSKMQAIFRIWDVNQKTFYLRNNQLVAGYLQGPVNVNLEEK
IDVVPPIEPHALFLGIHGGKMCLSCVKSGDETRLQLEAVNITDLSENKQDKRFAFIRSDSGPTTSFESAA
CPGWFLCTAMEADQPVSLTNMPDEGVMVTKFYFQEDE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6115_e03.zip

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_173842

ORF Size: 531 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_173842.3](#)

RefSeq Size: 1760 bp

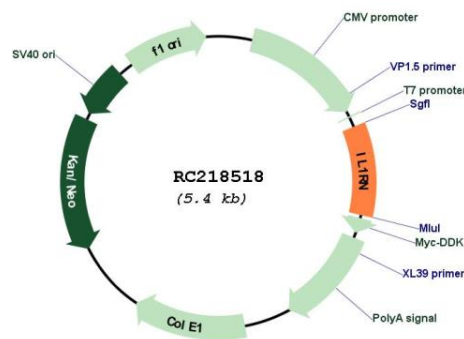
RefSeq ORF: 534 bp

Locus ID: 3557

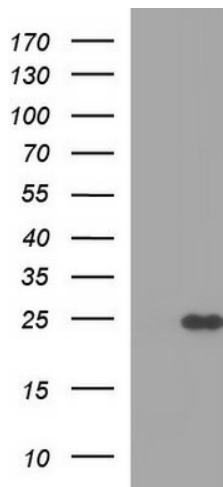
UniProt ID: [P18510](#)
Cytogenetics: 2q14.1
Protein Families: Druggable Genome, Secreted Protein
MW: 17.1 kDa

Gene Summary: The protein encoded by this gene is a member of the interleukin 1 cytokine family. This protein inhibits the activities of interleukin 1, alpha (IL1A) and interleukin 1, beta (IL1B), and modulates a variety of interleukin 1 related immune and inflammatory responses, particularly in the acute phase of infection and inflammation. This gene and five other closely related cytokine genes form a gene cluster spanning approximately 400 kb on chromosome 2. A polymorphism of this gene is reported to be associated with increased risk of osteoporotic fractures and gastric cancer. Several alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Aug 2020]

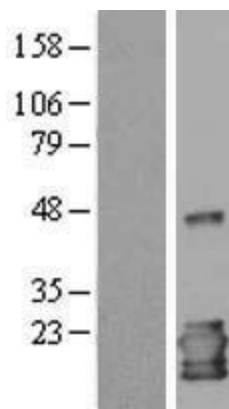
Product images:



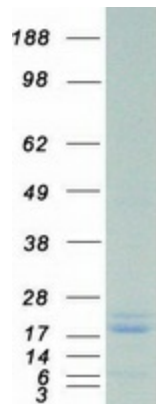
Circular map for RC218518



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY IL1RN (Cat# RC218518, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-IL1RN (Cat# [TA590309]). Positive lysates [LY403570] (100ug) and [LC403570] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403570]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218518 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified IL1RN protein (Cat# [TP318518]). The protein was produced from HEK293T cells transfected with IL1RN cDNA clone (Cat# RC218518) using MegaTran 2.0 (Cat# [TT210002]).