

Product datasheet for **RC221874**

IL6R (NM_000565) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IL6R (NM_000565) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IL6R
Synonyms:	CD126; gp80; HIES5; IL-1Ra; IL-6R; IL-6R-1; IL-6RA; IL6Q; IL6QTL; IL6RA; IL6RQ
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC221874 representing NM_000565
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCTGGCCGTCGGCTGCGCGCTGCTGGCTGCCCTGCTGGCCGCGCCGGAGCGGCCTGGCCCCAAGGC
 GCTGCCCTGCGCAGGAGGTGGCGAGAGCGTGCTGACCAGTCTGCCAGGAGACAGCGTGACTCTGACCTG
 CCCGGGGGTAGAGCCGGAAGACAATGCCACTGTTCACTGGGTGCTCAGGAAGCCGGCTGCAGGCTCCAC
 CCCAGCAGATGGGCTGGCATGGGAAGGAGGCTGCTGCTGAGGTCGGTGCAGCTCCACGACTCTGGAACT
 ATTCATGCTACCGGGCCGCCCCAGCTGGGACTGTGCACTTGTGGTGGATGTTCCCCCGAGGAGCC
 CCAGCTCTCTGCTTCCGGAAGAGCCCCCTCAGCAATGTTGTTTGTGAGTGGGTCTCGGAGCACCCCA
 TCCCTGACGACAAAGGCTGTGCTCTTGGTGAAGAGTTTCAGAACAGTCCGGCCGAGACTTCCAGGAGC
 CGTGCCAGTATCCAGGAGTCCAGAAGTTCCTCTGCCAGTTAGCAGTCCCGGAGGAGACAGCTCTTT
 CTACATAGTGTCCATGTGCGTCGCCAGTAGTGTGGGAGCAAGTTCAGCAAACTCAAACCTTTCAGGGT
 TGTGGAATCTTGACGCTGATCCGCTGCCAATCACAGTCACTGCCGTGGCCAGAAACCCCGCTGGC
 TCAGTGTACCTGGCAAGACCCCACTCCTGGAATCATCTTTCTACAGACTACGGTTTGTAGCTCAGATA
 TCGGGCTGAACGGTCAAAGACATTCACAACATGGATGGTCAAGGACCTCCAGCATCACTGTGTATCCAC
 GACGCCTGGAGCGGCCTGAGGCAGTGGTGCAGCTTCGTGCCAGGAGGAGTTCGGGCAAGGCGAGTGA
 GCGAGTGGAGCCCGAGGCCATGGGCACGCCTGGACAGAATCCAGGAGTCTCCAGCTGAGAACGAGGT
 GTCCACCCCATGCAGGCACTTACTACTAATAAAGACGATGATAATTTCTTTCAGAGATTCTGCAAT
 GCGACAAGCCTCCAGTCAAGCTTCTTCTCAGTACCACTGCCACATTCCTGGTTGCTGGAGGGAGCC
 TGGCCTTCGGAACGCTCCTCTGCATTGCCATTGTTCTGAGGTTCAAGAAGACGTGGAAGCTGCGGGCTCT
 GAAGGAAGGCAAGACAAGCATGCATCCGCGTACTCTTTGGGGCAGCTGGTCCCGGAGAGGCTCGACCC
 ACCCCAGTGCTTGTCTCTCATCTCCCAACGGTGTCCCCAGCAGCCTGGGTCTGACAATACCTCGA
 GCCACAACCGACCAGATGCCAGGACCCACGGAGCCCTTATGACATCAGCAATACAGACTACTTCTTCCC
 CAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC221874 representing NM_000565
 Red=Cloning site Green=Tags(s)

MLAVGCALLAALLAAPGAALAPRRCPAQEVARGVLTSLPGDSVTLTCPGVEPEDNATVHWVLRKPAAGSH
 PSRWAGMGRRLLRVQLHDSGNYSCYRAGRPAGTVHLLVDVPPPEEPQLSCFRKSPLSNVCEWGRSTP
 SLTTKAVLLVRKFNQSPAEDFQEPQYQESQKFSQQLAVPEGDSFYIVSMCVASSVGSKFSKTQTFQG
 CGILQPDPPANITVTAVARNPRWLSVTWQDPHSWNSFYRLRFELRYRAERSKFTTWMVKDLQHHCVIH
 DAWGLRHVVQLRAQEEFGQGEWSEWSPAMGTPWTESRSPPAENEVSTPMQALTTNKDDNILFRDSAN
 ATSLPVQAASSVPLPTFLVAGGSLAFGLLCAIVLRFKKTWKLRLALKEGKTSMHPPYSLGQLVPERPRP
 TPVLVPLISPPVSPSSLGSDNTSSHNRPDARDPRSPYDISNTDYFFPR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6161_e02.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_000565

ORF Size: 1404 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.

RefSeq: [NM_000565.4](#)
RefSeq Size: 4176 bp

RefSeq ORF: 1407 bp

Locus ID: 3570

UniProt ID: [P08887](#)
Cytogenetics: 1q21.3

Domains: ig, IGc2, IG, FN3

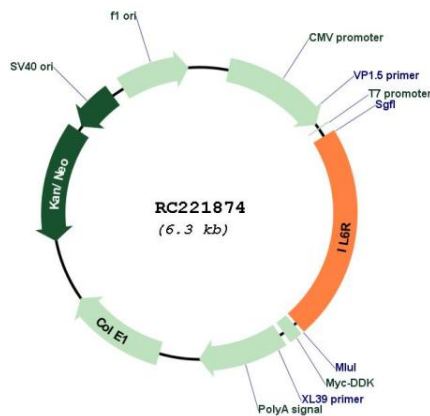
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

Protein Pathways: Cytokine-cytokine receptor interaction, Hematopoietic cell lineage, Jak-STAT signaling pathway

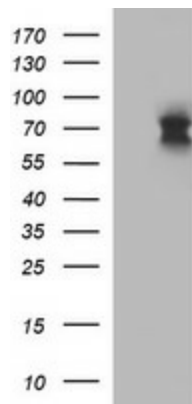
MW: 51.5 kDa

Gene Summary: This gene encodes a subunit of the interleukin 6 (IL6) receptor complex. Interleukin 6 is a potent pleiotropic cytokine that regulates cell growth and differentiation and plays an important role in the immune response. The IL6 receptor is a protein complex consisting of this protein and interleukin 6 signal transducer (IL6ST/GP130/IL6-beta), a receptor subunit also shared by many other cytokines. Dysregulated production of IL6 and this receptor are implicated in the pathogenesis of many diseases, such as multiple myeloma, autoimmune diseases and prostate cancer. Alternatively spliced transcript variants encoding distinct isoforms have been identified in this gene. A pseudogene of this gene is found on chromosome 9. [provided by RefSeq, Aug 2020]

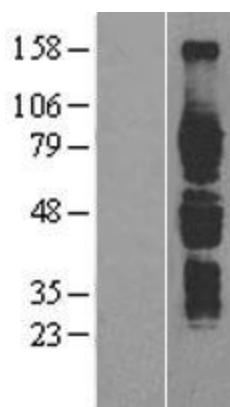
Product images:



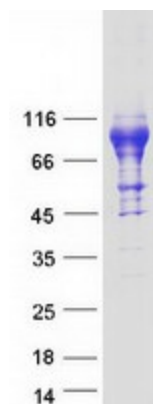
Circular map for RC221874



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY IL6R (Cat# RC221874, 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-IL6R antibody (Cat# [TA506859]). Positive lysates [LY400192] (100ug) and [LC400192] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400192]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221874 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified IL6R protein (Cat# [TP321874]). The protein was produced from HEK293T cells transfected with IL6R cDNA clone (Cat# RC221874) using MegaTran 2.0 (Cat# [TT210002]).