

## Product datasheet for RC216444

### IL12RB1 (NM\_153701) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	IL12RB1 (NM_153701) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IL12RB1
Synonyms:	CD212; IL-12R-BETA1; IL12RB; IMD30
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216444 representing NM_153701 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGGAGCCGCTGGTGACCTGGGTGGTCCCCCTCTTCTCTTCTGCTGTCCAGGCAGGGCGCTGCCT  
 GCAGAACCAGTGAGTGCTGTTTTAGGACCCGCCATATCCGGATGCAGACTCAGGCTCGGCCTCGGGCCC  
 TAGGGACCTGAGATGCTATCGGATATCCAGTGATCGTTACGAGTGCTCCTGGCAGTATGAGGGTCCCACA  
 GCTGGGGTCAGCCACTTCTGCGGTGTTGCCTTAGCTCCGGGCGCTGCTGCTACTTCGCCGCCGGCTCAG  
 CCACCAGGCTGCAGTTCTCCGACCAGGCTGGGGTGTCTGTGCTGTACACTGTCACACTCTGGGTGGAATC  
 CTGGGCCAGGAACCAGACAGAGAAGTCTCCTGAGGTACCCCTGCAGCTCTACAACCTAGTTAAATATGAG  
 CCTCCTCTGGGAGACATCAAGGTGTCCAAGTTGGCCGGGCGAGCTGCGTATGGAGTGGGAGACCCCGGATA  
 ACCAGGTTGGTGCTGAGGTGCAGTTCGGGACCCGACACCCAGCAGCCCATGGAAGTTGGGCGACTGCGG  
 ACCTCAGGATGATGATACTGAGTCTGCCTCTGCCCCCTGGAGATGAATGTGGCCAGGAATTCAGCTC  
 CGACGACGGCGGCTGGGAGCCAAGGAAGTTCCTGGAGCAAGTGGAGCAGCCCTGTGTGCGTTCCCCCTG  
 AAAACCCCCACAGCCTCAGGTGAGATTCTCGGTGGAGCAGCTGGGCCAGGATGGGAGGAGCGGCTGAC  
 CCTGAAAGAGCAGCCAACCCAGCTGGAGCTTCAGAAGGCTGTCAAGGGCTGGCGCTGGCACGGAGGTC  
 ACTTACCGACTACAGCTCCACATGCTGTCTGCCCCGTGAAGGCCAAGGCCACGAGCCCTGCACCTGG  
 GGAAGATGCCCTATCTCTCGGGTGTGCTCAACGTGGCTGTATCTCCTCGAACAATTGTTGCTCTGG  
 CCTGAACCAGACGTGGCACATTCTGCCGACACCCACACAGATGGCATGATCTCAGCTCACTGCAACCTC  
 CGCCTTCCAGATTCAAGAGATTCTCCTGCTTCAGCCTCCCGAGTAGCTGGGATTACAGGCATCTGCCACC  
 ATACCCGGCTAATTTGTATTTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA


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**Protein Sequence:** >RC216444 representing NM\_153701  
 Red=Cloning site Green=Tags(s)

MEPLVTWVPLLFLFLLSRQGAACRTSECCFQDPYPDADSGSASGPRDLRCYRISSDRYECSWQYEGPT  
 AGVSHFLRCCLSSGRCCYFAAGSATRLQFSDQAGVSVLYTVTLWVESWARNQTEKSPEVTLQLYNSVKYE  
 PPLGDIKYSKLAGQLRMEWETPDNQVGAEVQFRHRTSPSPWKLGDGCPQDDDTESCLCPLEMNVAQEFQL  
 RRRRLGSQSSWSKWSSPVCVPPENPPQPQVRF SVEQLGQDGRRLTLKEQPTQLELPEGCQGLAPGTEV  
 TYRLQLHMLSCPCKAKATRTLHLGKMPYLSGAAYNVAVISSNQFGPLNQTHWIPADTHTDGMISAHCNL  
 RLPDSRDPASASRVAGITGICHHTRLILYF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6118\\_h08.zip](https://cdn.origene.com/chromatograms/mk6118_h08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_153701

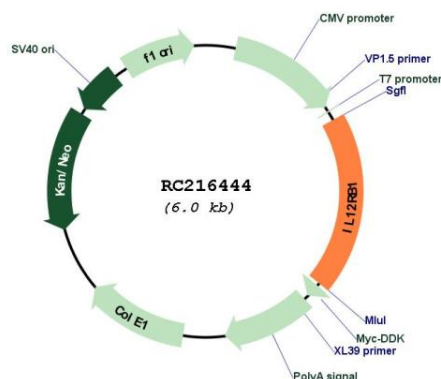
**ORF Size:** 1143 bp

**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.

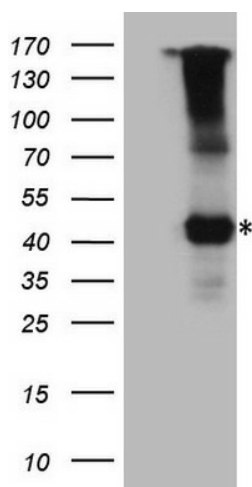
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_153701.3</a>
<b>RefSeq Size:</b>	1881 bp
<b>RefSeq ORF:</b>	1146 bp
<b>Locus ID:</b>	3594
<b>UniProt ID:</b>	<a href="#">P42701</a>
<b>Cytogenetics:</b>	19p13.11
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway
<b>MW:</b>	39.6 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a type I transmembrane protein that belongs to the hemopoietin receptor superfamily. This protein binds to interleukine 12 (IL12) with a low affinity, and is thought to be a part of IL12 receptor complex. This protein forms a disulfide-linked oligomer, which is required for its IL12 binding activity. The coexpression of this and IL12RB2 proteins was shown to lead to the formation of high-affinity IL12 binding sites and reconstitution of IL12 dependent signaling. Mutations in this gene impair the development of interleukin-17-producing T lymphocytes and result in increased susceptibility to mycobacterial and Salmonella infections. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014]

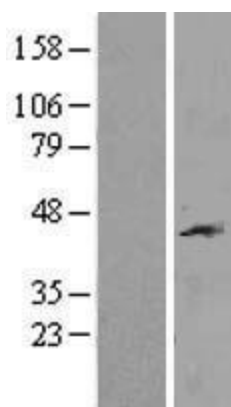
## Product images:



Circular map for RC216444



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY IL12RB1 (Cat# RC216444, 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-IL12RB1 (Cat# [TA808195])(1:500). Positive lysates [LY403516] (100ug) and [LC403516] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403516]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216444 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).