

## Product datasheet for **RG239245**

### IL12RB1 (NM\_001290023) Human Tagged ORF Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids                           |
| Product Name:             | IL12RB1 (NM_001290023) Human Tagged ORF Clone |
| Tag:                      | TurboGFP                                      |
| Symbol:                   | IL12RB1                                       |
| Synonyms:                 | CD212; IL-12R-BETA1; IL12RB; IMD30            |
| Mammalian Cell Selection: | Neomycin                                      |
| Vector:                   | pCMV6-AC-GFP (PS100010)                       |
| E. coli Selection:        | Ampicillin (100 ug/mL)                        |



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ORF Nucleotide  
Sequence:

>RG239245 representing NM\_001290023.  
Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCACGATCGCC
ATGGAGCCGCTGGTGACCTGGTGGTCCCCTCCTCTTCTCTGCTGTCCAGGCAGGGCGCTGCC
TGCGAACCAGTGAGTGCTGTTTTTCAGGACCCGCCATATCCGGATGCAGACTCAGGCTCGGCCTCGGGC
CCTAGGGACCTGAGATGCTATCCGATATCCAGTGATCGTTACGAGTGCTCCTGGCAGTATGAGGGTCCC
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CGCTGCCGAGATGAAGACAGCAAACAGGTGTCAGAGCATCCCGTGCAGCCACAGAGACCAAGTTACC
CTCAGTGGCCTGCGGGCTGGTGTAGCCTACACGGTGCAGGTGCGAGCAGACACAGCGTGGCTGAGGGT
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TGGCAGTGATCAACCCAGTGGACTTCCAGGAAGAGGCATCCCTGCAGGAGGCCCTGGTGGTAGAGATG
TCTGGGACAAAGGCGAGAGGACTGAGCCTCTCGAGAAGACAGAGCTACCTGAGGGTGCCCTGAGCTG
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ACCGGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

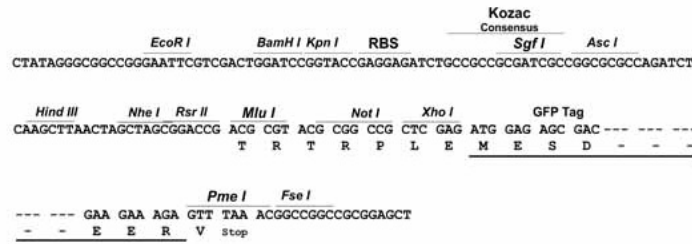
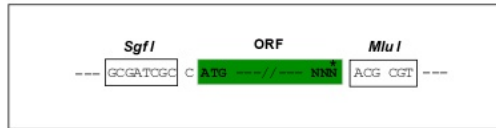
**Protein Sequence:** >Peptide sequence encoded by RG239245  
 Blue=ORF Red=Cloning site Green=Tag(s)

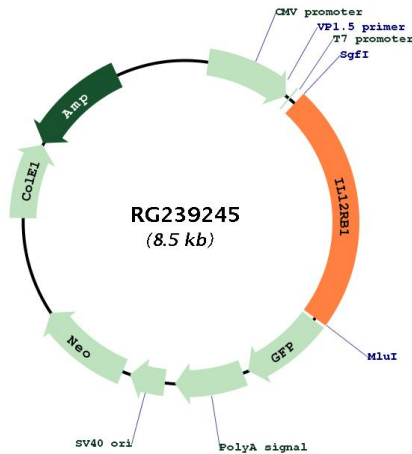
MEPLVTWVPLLFLFLLSRQGAACRTSECCFQDPPYPDADSGSASGPRDLRCYRISSDRYECSWQYEGP  
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 YEPPLGDIKVKLAGQLRMEWETPDNQVGAEVQFRHRTSPSPWKLGDGCPQDDTESCLCPLEMNVAQE  
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 YITIFASAHEPEKLTWSTVLSTYHFGGNASAAGTPHHVSVKNHSLDSVSDWAPSLSTPCGVLKEYVV  
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 LGSFLSILLVGVLYLGNRAARHLCPPLPTCASSAIEFPGKETWQWINPVDFQEEASLQEALV VEM  
 SWDKGERTEPLEKTELPEGAPELALDTELSLEDGDRCDR  
 TRTRPLEMESDEGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRS NATVEHLHPMGDNDLDGSFTRTFLRDGGYYSSVVD SHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


|                          |  |
|--------------------------|--|
| <b>ACCN:</b>             | NM_001290023   |
| <b>ORF Size:</b>         | 1980 bp  |
| <b>OTI Disclaimer:</b>   | 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. <a href="#">More info</a> |
| <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>RefSeq:</b>           | <a href="#">NM_001290023.2</a>   |
| <b>RefSeq Size:</b>      | 2787 bp  |
| <b>RefSeq ORF:</b>       | 1983 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  |

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

**MW:** 73.4 kDa

**Gene Summary:** 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]