

## Product datasheet for **SC122579**

### IL2 Receptor beta (IL2RB) (NM\_000878) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	IL2 Receptor beta (IL2RB) (NM_000878) Human Untagged Clone
Tag:	Tag Free
Symbol:	IL2 Receptor beta
Synonyms:	CD122; IL15RB; IMD63; P70-75
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_000878 edited  
 GGGCCCTGGAGAGATGGCCACGGTCCCAGCACCGGGGAGGACTGGAGAGCGCGCTGCC  
 ACCGCCCCATGTCTCAGCCAGGGCTTCTTCTCGGCTCCACCCGTGGATGTAATGGCG  
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AAAAAAAAAAAAAA

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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_000878 unedited AAATTCACAGGGATGGGCCCTGGTATATATGGCCACGGTACCCAGCACCGGGGAGGACTG GAGAGCGCGCGCTGCCACCGCCCATGTCTCAGCCAGGGCTTCCTTCCTCGGCTCCACCC TGTGGATGTAATGGCGGCCCTGCTCTGTCTGGCGTCTGCCCTCCTCATCCTCCTCCT GCCCTGGCTACCTCTTGGGCATCTGCAGCGGTGAATGGCACTTCCCAGTTCACATGCTT CTACAACCTCGAGAGCCAACATCTCCTGTGTCTGGAGCCAAGATGGGGCTCTGCAGGACAC TTCCTGCCAAGTCCATGCCTGGCCGACAGCGCGGTGGAACCAACCTGTGAGCTGCT CCCCGTGAGTCAAGCATCCTGGGCCTGCAACCTGATCCTCGGAGCCCCAGATTCTCAGAA ACTGACCACAGTTGACATCGTCACCCTGAGGGTCTGTGCCGTGAGGGGTGCGATGGAG GGTGATGGCCATCCAGGACTTCAAGCCCTTGGAGAACCTTCGCCTGATGGCCCCATCTC CCTCCAAGTTGTCCAGTGGAGACCCACAGATGCAACATAAGCTGGGAAATCTCCAAGC CTCCCACTACTTTGAAAGACACCTGGAGTTCGAGGCCCGACGCTGTTTCCAGCCACAC CTGGGAGGAGGCCCTGCTTGACTCTCAAGCAAAAGCATGAATTGGATCTGCCTGGAA ACGCTCACCCCAACCCCAAGTATGACCCCAAGTCCCGTCAAGCCTCTGTAAGGCAGCT CACGACTGGAGCCCTTGATCAATCCCTGGCCTTCAGAAAAACCTGGCGCCCTTGGGAA GGACACCATCCGGGGCTCTGCCCCG
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_000878
<b>Insert Size:</b>	4035 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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>RefSeq:</b>	<u>NM_000878.2, NP_000869.1</u>
<b>RefSeq Size:</b>	4045 bp
<b>RefSeq ORF:</b>	1656 bp
<b>Locus ID:</b>	3560
<b>UniProt ID:</b>	<u>P14784</u>
<b>Cytogenetics:</b>	22q12.3
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Cytokine-cytokine receptor interaction, Endocytosis, Jak-STAT signaling pathway

**Gene Summary:**

The interleukin 2 receptor, which is involved in T cell-mediated immune responses, is present in 3 forms with respect to ability to bind interleukin 2. The low affinity form is a monomer of the alpha subunit and is not involved in signal transduction. The intermediate affinity form consists of an alpha/beta subunit heterodimer, while the high affinity form consists of an alpha/beta/gamma subunit heterotrimer. Both the intermediate and high affinity forms of the receptor are involved in receptor-mediated endocytosis and transduction of mitogenic signals from interleukin 2. The protein encoded by this gene represents the beta subunit and is a type I membrane protein. The use of alternative promoters results in multiple transcript variants encoding the same protein. The protein is primarily expressed in the hematopoietic system. The use by some variants of an alternate promoter in an upstream long terminal repeat (LTR) results in placenta-specific expression. [provided by RefSeq, Sep 2016]

Transcript Variant: This variant (1) represents the longest transcript. Variants 1, 2 and 3 encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.