

Product datasheet for **SC124143**

IL2 Receptor alpha (IL2RA) (NM_000417) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IL2 Receptor alpha (IL2RA) (NM_000417) Human Untagged Clone
Tag:	Tag Free
Symbol:	IL2 Receptor alpha
Synonyms:	CD25; IDDM10; IL2R; IMD41; p55; TCGFR
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC124143 sequence for NM_000417 edited (data generated by NextGen Sequencing)

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ATGGATTACACCTGCTGATGTGGGACTGCTCACGTTTCATCATGGTGCCTGGCTGCCAG
GCAGAGCTCTGTGACGATGACCCGCCAGAGATCCACACGCCACATTCAAAGCCATGGCC
TACAAGGAAGGAACCATGTTGAACTGTGAATGCAAGAGAGGTTTCCGCAGAATAAAAAGC
GGGTCACCTCTATATGCTCTGTACAGGAACTCTAGCCACTCGTCCTGGGACAACCAATGT
CAATGCACAAGCTCTGCCACTCGGAACACAACGAAACAAGTGACACCTCAACCTGAAGAA
CAGAAAGAAAGGAAAACACAGAAATGCAAAGTCCAATGCAGCCAGTGGACCAAGCGAGC
CTTCCAGGTCACCTGCAGGAACTCCACCATGGGAAAATGAAGCCACAGAGAGAATTTAT
CATTTCTGTTGGGGCAGATGGTTTATTATCAGTGCGTCCAGGGATACAGGGCTCTACAC
AGAGGTCTGCTGAGAGCGTCTGCAAAATGACCCACGGGAAGACAAGGTGGACCCAGCCC
CAGCTCATATGCACAGGTGAAATGGAGACCAGTCAGTTTCCAGGTGAAGAGAAGCCTCAG
GCAAGCCCCGAAGGCCGTCTGAGAGTGAGACTTCTGCCTCGTCAACAACAGATTTT
CAAATACAGACAGAAATGGCTGCAACCATGGAGACGTCCATTTACAACAGAGTACCAG
GTAGCAGTGGCCGGCTGTGTTTTCTGCTGATCAGCGTCTCCTCCTGAGTGGGCTCACC
TGGCAGCGGAGACAGAGGAAGAGTAGAAGAACAATCTAG
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Clone variation with respect to NM_000417.2



[View online »](#)

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000417 unedited
 NCGAGTTCAGATTTGTATACGACTCATATAGGCGGCCGCGNAATTCGCACGAGGCAAGGG
 TGACAGCCAGGCGGACCGATCTTCCCATCCCACATCCTCCGGCGCGATGCCAAAAAGAG
 GCTGACGGCAACTGGGCTTCTGCAGAGAAAGACCTCCGTTCACTGCCCCGGCTGGTCC
 CAAGGGTCAGGAAGATGGATTACACCTGCTGATGTGGGACTGCTCACGTTTCATCATGG
 TGCTGGCTGCCAGGCAGAGCTCTGTGACGATGACCCGCCAGAGATCCCACACGCCACAT
 TCAAAGCCATGGCCTACAAGGAAGGAACCATGTTGAACTGTGAATGCAAGAGAGGTTTCC
 GCAGAATAAAAAGCGGGTCACTCTATATGCTCTGTACAGGAAACTCTAGCCACTCGTCTCT
 GGGACAACCAATGTCAATGCACAAGCTCTGCCACTCGGAACACAACGAAACAAGTGACAC
 CTCAACCTGAAGAACAGAAAGAAAGGAAAACCACAGAAATGCAAAGTCCAATGCAGCCAG
 TGGACCAAGCGAGCCTTCCAGGTCAGTGCAGGGAACCTCCACCATGGGAAAATGAAGCCA
 CAGAGAGAATTTATCATTTCTGGTGGGCGAGATGGTTTATTATCAGTGCCTCCAGGGAT
 ACAGGGCTCTACACAGAGTCTGCTGAGAGCGTCTGCAAATGACCCACGGGAAGACAA
 GGTGGACCCAGCCCAGCTCATATGCACAGGTGANATGGAGACCAGTCAGTTTCCAGGTG
 AAGAGAAGCCTCANNCGAGCCCCGAAGGCCGCTCTGAGAGTGAGACTTCTCGCTCGTCA
 CAACACAGATTTCAATACAGACAGAAATGGGCTGCACCATGGAGACGTCCATATTTACA
 ACAGAGTAC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000417 unedited
 TGGGATAGGGNNNNNATGCACTGCATTTCAACTTCCCGGCCAGGATAGGCACTGGGGAG
 GNNNNAAGGGATGCCACCCGGGATCTGTTCAAGAAACAGCTATGACTTTGGCCGCAATCT
 ANAGTCGAGTTTCC
 ATACCATTTCATGCTTTAATGAACACATTTTCATGAAAATAAAATGGAGAGTTCTAGTGGT
 TTTGCCCTTCTTCAACGGCGAAATTGCTATTTAAAAGTGGTAGCGCTCGCTTTTG
 ATGGGACTGAGCTGGCATAAAAAAAGGTTGCCACTGCCCGGTGCTCTGTGATGTGACTT
 CAGAGCTTCCAAAACGCAGGCAAGCACAACGGATGTTTCTGGGCGACCATTTAGCACCT
 TTGATTTCACTTGGGCTTCATGACTTCTGTTGTCTGTTCCCGCTTCTTACCAAAAAATT
 CTTGTTCTTTGGTTTTCTAGATTGTTCTTCTACTTCTCTGTCTCCGCTGCCAGGTG
 AGCCCACTCAGGAGGAGGACGCTTATCAGCAGGAAAACACAGCCGGCCACTGCTACCTGG
 TACTCTGTTGTAATATGGACGTCTCCTTGGTTGCAGCCATTTTGTCTGNATTTGAAAA
 TCTGTTGTGTGACAAGGCAGGAAGTCTCACTCTCAAGACGGCCTTTGGGCTTGCCTGA
 AGCTTCTCTTACCTGGAAACTGACTTGTCTCCTTTACCTGTGCATATAGCTTGGGCTG
 GTCCACCTTGTTCCTGGTATTTTTCAG

Restriction Sites:

NotI-NotI

ACCN:

NM_000417

Insert Size:

1400 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 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](#)

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:	<ol style="list-style-type: none">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:	<u>NM_000417.1</u> , <u>NP_000408.1</u>
RefSeq Size:	2308 bp
RefSeq ORF:	819 bp
Locus ID:	3559
UniProt ID:	<u>P01589</u>
Cytogenetics:	10p15.1
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
Protein Pathways:	Cytokine-cytokine receptor interaction, Endocytosis, Hematopoietic cell lineage, Jak-STAT signaling pathway
Gene Summary:	<p>The interleukin 2 (IL2) receptor alpha (IL2RA) and beta (IL2RB) chains, together with the common gamma chain (IL2RG), constitute the high-affinity IL2 receptor. Homodimeric alpha chains (IL2RA) result in low-affinity receptor, while homodimeric beta (IL2RB) chains produce a medium-affinity receptor. Normally an integral-membrane protein, soluble IL2RA has been isolated and determined to result from extracellular proteolysis. Alternately-spliced IL2RA mRNAs have been isolated, but the significance of each is presently unknown. Mutations in this gene are associated with interleukin 2 receptor alpha deficiency. Patients with severe Coronavirus Disease 2019 (COVID-19), the disease caused by the novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), have significantly elevated levels of IL2R in their plasma. Similarly, serum IL-2R levels are found to be elevated in patients with different types of carcinomas. Certain IL2RA and IL2RB gene polymorphisms have been associated with lung cancer risk. [provided by RefSeq, Jul 2020]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). 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.</p>