

Product datasheet for **RG215768**

IL2 Receptor alpha (IL2RA) (NM_000417) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IL2 Receptor alpha (IL2RA) (NM_000417) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	IL2 Receptor alpha
Synonyms:	CD25; IDDM10; IL2R; IMD41; p55; TCGFR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG215768 representing NM_000417 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGATTCATACCTGCTGATGTGGGGACTGCTCACGTTTCATCATGGTGCCTGGCTGCCAGGCAGAGCTCT
 GTGACGATGACCCGCCAGAGATCCACACGCCACATTCAAAGCCATGGCCTACAAGGAAGGAACCATGTT
 GAACTGTGAATGCAAGAGAGGTTTCCGCAGAATAAAAAGCGGGTCACTCTATATGCTCTGTACAGGAAAC
 TCTAGCCACTCGTCCTGGGACAACCAATGTCAATGCACAAGCTCTGCCACTCGGAACACAACGAAACAAG
 TGACACCTCAACCTGAAGAACAGAAAGAAAGAAAACACAGAAATGCAAAGTCCAATGCAGCCAGTGGA
 CCAAGCGAGCCTTCCAGGTCACTGCAGGGAACCTCCACCATGGGAAAATGAAGCCACAGAGAGAATTTAT
 CATTTCTGTTGGGGCAGATGGTTTATTATCAGTGCCTCCAGGGATACAGGGCTCTACACAGAGGTCTCTG
 CTGAGAGCGTCTGCAAAATGACCCACGGGAAGACAAGGTGGACCCAGCCCAGCTCATATGCACAGGTGA
 AATGGAGACCACTCAGTTTCCAGGTGAAGAGAAGCCTCAGGCAAGCCCCGAAGGCCGTCTGAGAGTGAG
 ACTTCTGCCTCGTCACAACAACAGATTTTCAAATACAGACAGAAATGGCTGCAACCATGGAGACGTCCA
 TATTTACAACAGAGTACCAGGTAGCAGTGGCCGGCTGTGTTTTCTGCTGATCAGCGTCTCTCTCTGAG
 TGGGCTCACCTGGCAGCGGAGACAGAGGAAGAGTAGAAGAACAATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA


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Protein Sequence: >RG215768 representing NM_000417
 Red=Cloning site Green=Tags(s)

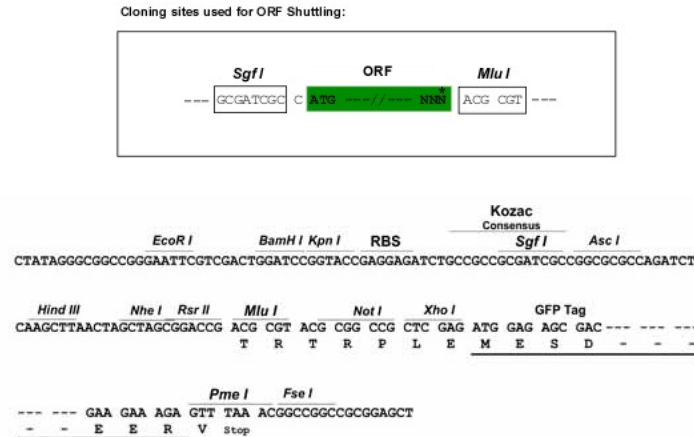
MDSYLLMWGLLTFIMVPGCAELCDDDPPEIPHATFKAMAYKEGTM LNCECKRGFRRIKSGSLYMLCTGN
 SSHSSWDNQCQCTSSATRNNTTKQVTPQPEEQKERKTTEMQSPMQPVDQASLPGHCREPPPWENEATERIY
 HFVVGQMVVYQVCVQGYRALHRGPAESVCKMTHGKTRWTQPLICTGEMETSQFPGEEKPQASPEGRPESE
 TSCLVTTTDFQIQTEMAATMETSIFTTEYQVAVAGCVFLLISVLLLSGLTWQRRQRKSRRTI

TRTRPLE – GFP Tag – V

Chromatograms: https://cdn.origene.com/chromatograms/ja2510_e10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000417

ORF Size: 816 bp

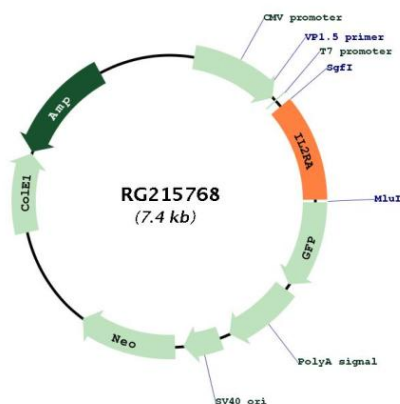
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_000417.3</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>

Product images:



Circular map for RG215768