

Product datasheet for **SC332039**

RAG2 (NM_001243785) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: RAG2 (NM_001243785) Human Untagged Clone
Tag: Tag Free
Symbol: RAG2
Synonyms: RAG-2
Vector: pCMV6-Entry (PS100001)
Fully Sequenced ORF: >SC332039 representing NM_001243785.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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ATGTCTCTGCAGATGGTAACAGTCAGTAATAACATAGCCTTAATTCAGCCAGGCTTCTCACTGATGAAT
TTTGATGGACAAGTTTTCTTCTTTGGACAAAAAGGCTGGCCAAAAGATCCTGCCCACTGGAGTTTTTC
CATCTGGATGTAAGCATAACCATGTCAAAGTGAAGCCTACAATTTTCTAAGGATTCCTGCTACCTC
CCTCCTCTCGCTACCCAGCCACTTGCACATTCAAAGGCAGCTTGGAGTCTGAAAAGCATCAATACATC
ATCCATGGAGGGAAAACACCAAACAATGAGGTTTCAGATAAGATTTATGTCATGTCTATTGTTTGAAG
AACACAAAAAGGTTACTTTTCGCTGCACAGAGAAAGACTTGGTAGGAGATGTTCTGAAGCCAGATAT
GGTCATCCATTAATGTGGTGTACAGCCGAGGGAAAAGTATGGGTGTTCTTTGGAGGACGCTCATAC
ATGCCTTCTACCCACAGAACACAGAAAAATGGAATAGTGTAGCTGACTGCCTGCCTGTGTTTTCTG
GTGGATTTTGAATTTGGGTGTGCTACATCATACATTCTCCAGAACTTCAGGATGGGCTATCTTTTCAT
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GCCAACCTGTACAGAATAAGGGTTGATCTTCCCCTGGGTAGCCCAGCTGTGAATTGCACAGCTTTGCCA
GGAGGAATCTCTGTCTCCAGTGAATCCTGACTCAAATAACAATGATGAATTTGTTATTGTTGGTGGC
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CGTGAGATGGAGACCCAGATTGGACCCAGACATTAAGCACAGCAAGATATGGTTTGAAGCAACATG
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AGTTTTGATGGTATGATGAATTTGACACCTATAATGAAGATGATGAAGAAGATGAGTCTGAGACAGGC
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CTCAACAAACCCGCATGATCTACTGCTCATGGGGATGGGCACTGGGTCATGCTCAGTGCATGGAT
CTGGCAGAACGCACACTCATCCATCTGTCAGCAGGAAGCAACAAGTATTACTGCAATGAGCATGTGGAG
ATAGCAAGAGCTCTACACTCCCAAGAGTCTACCCTTAAAAAGCCTCCAATGAAATCCCTCCGT
AAAAAGGTTCTGAAAAATCTGACTCCTGCCAAGAAATCCTTTCTTAGAAGGTTGTTGATAG
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Restriction Sites: SgfI-MluI
ACCN: NM_001243785
Insert Size: 1584 bp



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OTI Disclaimer:	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).
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:	NM_001243785.1
RefSeq Size:	2652 bp
RefSeq ORF:	1584 bp
Locus ID:	5897
UniProt ID:	P55895
Cytogenetics:	11p12
Protein Families:	Druggable Genome
Protein Pathways:	Primary immunodeficiency
MW:	59.2 kDa
Gene Summary:	<p>This gene encodes a protein that is involved in the initiation of V(D)J recombination during B and T cell development. This protein forms a complex with the product of the adjacent recombination activating gene 1, and this complex can form double-strand breaks by cleaving DNA at conserved recombination signal sequences. The recombination activating gene 1 component is thought to contain most of the catalytic activity, while the N-terminal of the recombination activating gene 2 component is thought to form a six-bladed propeller in the active core that serves as a binding scaffold for the tight association of the complex with DNA. A C-terminal plant homeodomain finger-like motif in this protein is necessary for interactions with chromatin components, specifically with histone H3 that is trimethylated at lysine 4. Mutations in this gene cause Omenn syndrome, a form of severe combined immunodeficiency associated with autoimmune-like symptoms. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (3) includes an alternate exon in the 5' UTR compared to variant 1. Variants 1, 3 and 4 encode the same protein.</p>