

## Product datasheet for SC332040

### RAG2 (NM\_001243786) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RAG2 (NM\_001243786) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** RAG2  
**Synonyms:** RAG-2  
**Vector:** pCMV6-Entry (PS100001)  
**Fully Sequenced ORF:** >SC332040 representing NM\_001243786.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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ATGTCTCTGCAGATGGTAAACAGTCAGTAATAACATAGCCTTAATTCAGCCAGGCTTCTCACTGATGAAT
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CCTCCTCTCGCTACCCAGCCACTTGCACATTCAAAGGCAGCTTGGAGTCTGAAAAGCATCAATACATC
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ATAGCAAGAGCTCTACACTCCCAAAGAGTCTACCCTTAAAAAGCCTCCAATGAAATCCCTCCGT
AAAAAGGTTCTGAAAAATCTGACTCCTGCCAAGAAATCCTTTCTTAGAAGGTTGTTGATAG
  
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**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001243786  
**Insert Size:** 1584 bp



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<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><a href="#">NM_001243786.1</a></u>
<b>RefSeq Size:</b>	2846 bp
<b>RefSeq ORF:</b>	1584 bp
<b>Locus ID:</b>	5897
<b>UniProt ID:</b>	<u><a href="#">P55895</a></u>
<b>Cytogenetics:</b>	11p12
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Primary immunodeficiency
<b>MW:</b>	59.2 kDa
<b>Gene Summary:</b>	<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 (4) includes an alternate exon in the 5' UTR compared to variant 1. Variants 1, 3 and 4 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.</p>