

## Product datasheet for **RC205065L4V**

### RAG2 (NM\_000536) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	RAG2 (NM_000536) Human Tagged ORF Clone Lentiviral Particle
Symbol:	RAG2
Synonyms:	RAG-2
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_000536
ORF Size:	1581 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC205065).
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. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_000536.1</a> , <a href="#">NP_000527.1</a>
RefSeq Size:	2457 bp
RefSeq ORF:	1584 bp
Locus ID:	5897
UniProt ID:	<a href="#">P55895</a>
Cytogenetics:	11p12
Protein Families:	Druggable Genome
Protein Pathways:	Primary immunodeficiency



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**MW:** 59.2 kDa

**Gene Summary:** 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]