

Product datasheet for RC205065L4

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OriGene Technologies, Inc.

RAG2 (NM_000536) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: RAG2 (NM_000536) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: RAG2 Synonyms: RAG-2

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC205065).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_000536

ORF Size: 1581 bp



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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: 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 000536.1</u>, <u>NP 000527.1</u>

 RefSeq Size:
 2457 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: 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.

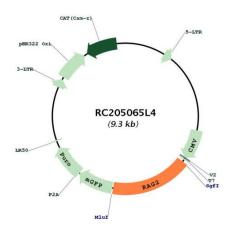
Mutations in this gene cause Omenn syndrome, a form of severe combined

immunodeficiency associated with autoimmune-like symptoms. [provided by RefSeq, Jul

2008]



Product images:



Circular map for RC205065L4