

Recombinant Human RAG2

Cat. No. RAG2-29371TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length Human RAG2 with N terminal proprietary tag; Predicted MWt 84.04 kDa inclusive of tag.
Species	Human
Source	Wheat Germ
ProteinLength	527 amino acids
Description	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.
Molecular Weight	84.040kDa inclusive of tags
Tissue specificity	Cells of the B- and T-lymphocyte lineages.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Form	Liquid
Purity	Proprietary Purification
Storage buffer	pH: 8.00Constituents:0.3% Glutathione, 0.79% Tris HCl
Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequences of amino acids	MSLQMVTVSNNIALIQPGFSLMNFDGQVFFFGQKGWPKRS CPTGVFHLDVKHNHV KLKPTIFSKDSCYLPPLRYPATCTF KGSLESEKHQYIIHGGKTPNNEVSDKIYVMSIV CKNNKKV TFRCTEKDLVGDVPEARYGHSINVVYSRGKSMGALFGGRS YMPSTHR TTEKWNSVADCLPCVFLVDFEFGCATSYILPEL QDGLSFHVSIKNDTIYILGGHSLA NNIRPANLYRIRVDL PLGSPAVNCTVLPGGISVSSAILTQTNNDEFVIVGGYQLE NQK RMICNIISLEDNKIEIREMETPDWTPDIKHSKIWFGS NTGNGTVFLGIPGDNKQVVSE GFYFYMLKCAEDDTNEEQT TFTNSQTSTEDPGDSTPFEDSEEFCSAEANSFDGD DEFD TYNEDDEEDESETGYWITCCPTCDVDINTWVPFYSTELNK PAMIYCSHGDG HWWHAQCMDLAERTLIHLSAGSNKYCYCNE HVEIARALHTPQRVLPLKKPPMKSLRK KGS GKILTPAKKS FLRRFLD
Sequence Similarities	Belongs to the RAG2 family.Contains 1 PHD-type zinc finger.
GENE INFORMATION	
Gene Name	RAG2 recombination activating gene 2 [Homo sapiens]
Official Symbol	RAG2
Synonyms	RAG2; recombination activating gene 2; V(D)J recombination-activating protein 2;

Gene ID	5897
mRNA Refseq	NM_000536
Protein Refseq	NP_000527
MIM	179616
Uniprot ID	P55895
Chromosome Location	11p13
Pathway	C-MYB transcription factor network, organism-specific biosystem; Primary immunodeficiency, organism-specific biosystem; Primary immunodeficiency, conserved biosystem;
Function	DNA binding; chromatin binding; endonuclease activity; metal ion binding; methylated histone residue binding;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA