



# Recombinant Human V (D)J recombination-activating protein 2

<b>Product Code</b>	CSB-EP345128HU-B
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	P55895
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	≥85% (SDS-PAGE)
<b>Sequence</b>	MSLQMVTVSN NIALIQPGFS LMNFDGQVFF FGQKGWPKRS CPTGVFHLDV KHNHVKLKPT IFSKDSCYLP PLRYPATCTF KGSLESEKHQ YIIHGGKTPN NEVSDKIYVM SIVCKNNKKV TFRCTEKDLV GDVPEARYGH SINVVYSRGK SMGVLFGGRS YMPSTHRTTE KWNSVADCLP CVFLVDFEFG CATSYILPEL QDGLSFHYSI AKNDTIYILG GHSLANNIRP ANLYRIRVDL PLGSPAVNCT VLPGGISVSS AILTQTNNDE FVIVGGYQLE NQKRMICNII SLEDNKIEIR EMETPDWTPD IKHSKIWFGS NMGNGTVFLG IPGDNKQVVS EGFYFYMLKC AEDDTNEEQT TFTNSQTSTE DPGDSTPFED SEEFCSAEA NSFDGDDEFD TYNEDDEEDE SETGYWITCC PTCDVDINTW VPFYSTELENK PAMIYCSHGD GHWVHAQCMD LAERTLIHLS AGSNKYCNE HVEIARALHT PQRVLPKPKP PMKSLRKKGS GKILTPAKKS FLRRLFD
<b>Source</b>	E.coli
<b>Target Names</b>	RAG2
<b>Protein Names</b>	Recommended name: V(D)J recombination-activating protein 2 Short name=RAG-2
<b>Expression Region</b>	1-527
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	full length protein
<b>Target Details</b>	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.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

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