

RAG2 Ab

Cat.#: BF0694
Size: 50ul,100ul,200ul

Concn.: 1mg/ml
Source: Mouse

Mol.Wt.: 59kDa
Clonality: Monoclonal

Application:	ELISA 1/10000, WB 1/500 - 1/2000
Reactivity:	Human
Purification:	Affinity-chromatography.
Specificity:	RAG2 Ab detects endogenous levels of total RAG2.
Immunogen:	Purified recombinant fragment of human RAG2 expressed in E. Coli.
Uniprot:	P55895
Description:	<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.</p>
Subcellular Location:	Nucleus.
Tissue Specificity:	Cells of the B- and T-lymphocyte lineages.
Similarity:	<p>The atypical PHD-type zinc finger recognizes and binds histone H3 trimethylated on 'Lys-4' (H3K4me3). The presence Tyr-445 instead of a carboxylate in classical PHD-type zinc fingers results in an enhanced binding to H3K4me3 in presence of dimethylated on 'Arg-2' (H3R2me2) rather than inhibited. The atypical PHD-type zinc finger also binds various phosphoinositides, such as phosphatidylinositol 3,4-bisphosphate binding (PtdIns(3,4)P2), phosphatidylinositol 3,5-bisphosphate binding (PtdIns(3,5)P2), phosphatidylinositol 4,5-bisphosphate</p>

(PtdIns(4,5)P2) and phosphatidylinositol 3,4,5-trisphosphate binding (PtdIns(3,4,5)P3) (By similarity).Belongs to the RAG2 family.

Storage Condition and Buffer:

Mouse IgG1 in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.

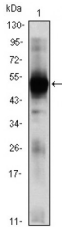


Figure 1: Western blot analysis using RAG2 mouse mAb against RAG2(AA: 350-527)-hlgGfc transfected HEK293 (1)cell lysate.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.

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