



RAG-2 Monoclonal Antibody

Catalog No	YP-Ab-13822
Isotype	IgG
Reactivity	Human
Applications	WB;ELISA
Gene Name	RAG2
Immunogen	Purified recombinant fragment of human RAG-2 (350-527aa) expressed in E. Coli.
Specificity	RAG-2 Monoclonal Antibody detects endogenous levels of RAG-2 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide, 0.5% BSA, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	1B4E5; RAG 2; RAG-2; V(D)J recombination-activating protein 2; RAG2
Observed Band	
Calculated Molecular Weight	
Cell Pathway	Nucleus .
Tissue Specificity	Cells of the B- and T-lymphocyte lineages.
Function	disease: Defects in RAG2 are a cause of combined cellular and humoral immune defects with granulomas (CHIDG) [MIM:233650]. CHIDG is an immunodeficiency disease with granulomas in the skin, mucous membranes, and internal organs. Other characteristics include hypogammaglobulinemia, a diminished number of T and B cells, and sparse thymic tissue on ultrasonography. disease: Defects in RAG2 are a cause of Omenn syndrome (OS) [MIM:603554]; a severe immunodeficiency characterized by the presence of activated, anergic, oligoclonal T-cells, hypereosinophilia, and high IgE levels. disease: Defects in RAG2 are a cause of severe combined immunodeficiency, autosomal recessive T cell-negative, B-cell-negative, NK cell-positive (T(-)B(-)NK(+)) SCID [MIM:601457]. SCID refers to a genetically and clinically heterogeneous group of rare congenital disorders characterized by impairment



of both humoral and cell-

Background

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 immunodef

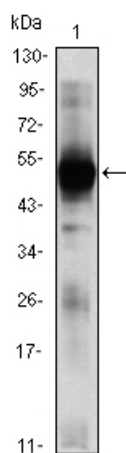
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis using RAG-2 Monoclonal Antibody against RAG2-hlgGfC transfected HEK293 (1)cell lysate.