Best Tools for immunology Research

RAG-2 Monoclonal Antibody

Catalog No :	YM0550
Reactivity :	Human
Applications :	WB;ELISA
Target :	RAG-2
Fields :	>>FoxO signaling pathway;>>Primary immunodeficiency
Gene Name :	RAG2
Protein Name :	V(D)J recombination-activating protein 2
Human Gene Id :	5897
Human Swiss Prot No :	P55895
Mouse Swiss Prot No :	P21784
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 :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	59kD

Cell Pathway : Primary immunodeficiency;

P References :

1. J Biol Chem. 2004 Sep 10;279(37):38360-8.
2. Immunity. 2005 Aug;23(2):203-12.
3. J Clin Invest. 2010 Apr 1;120(4):1337-44. doi: 10.1172/JCI41305.

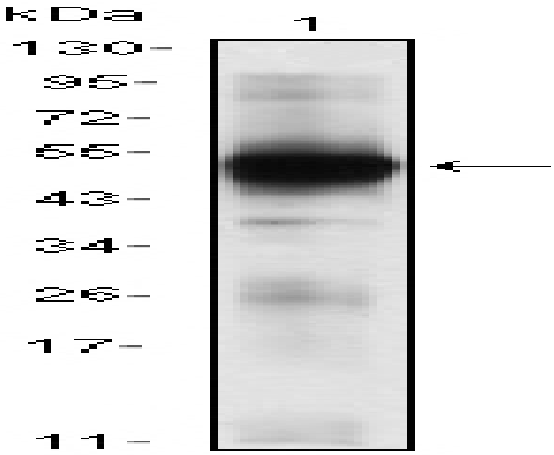
Background : This gene encodes a protein that is involved in the initiation of V(D)J recombination during B and T cell development. This protein forms a complex with the product of the adjacent recombination activating gene 1, and this complex can form double-strand breaks by cleaving DNA at conserved 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

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-

Subcellular Location : Nucleus .

Expression : Cells of the B- and T-lymphocyte lineages.

Products Images



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