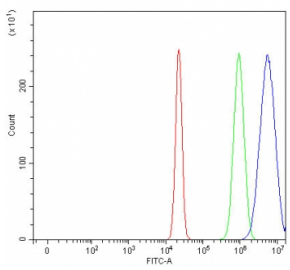
RAG2 Antibody / V(D)J recombination-activating protein 2 (RQ7827)

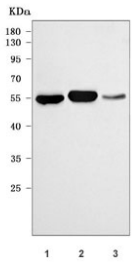
Catalog No.	Formulation	Size
RQ7827	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P55895
Applications	Western blot: 0.5-1ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This RAG2 antibody is available for research use only.



Flow cytometry testing of human U-2 OS cells with RAG2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= RAG2 antibody.



Western blot testing of 1) human MOLT4, 2) mouse thymus and 3) mouse spleen tissue lysate with RAG2 antibody. Predicted molecular weight ~59 kDa.

Description

Recombination activating gene 2, also known as RAG-2, is a protein that in humans is encoded by the RAG2 gene. 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.

Application Notes

Optimal dilution of the RAG2 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids F46-K503) was used as the immunogen for the RAG2 antibody.

Storage

After reconstitution, the RAG2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Copyright © NSJ Bioreagents. All rights reserved.