

RAG2 Monoclonal antibody

Catalog Number: 66998-1-Ig

Basic Information

Catalog Number: 66998-1-Ig	GenBank Accession Number: BC022397	Purification Method: Protein A purification
Size: 150ul , Concentration: 1800 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 5897	CloneNo.: 1B4E5
Source: Mouse	UNIPROT ID: P55895	Recommended Dilutions: WB 1:1000-1:8000 IF/ICC 1:400-1:1600
Isotype: IgG1	Full Name: recombination activating gene 2	
Immunogen Catalog Number: AG16780	Calculated MW: 527 aa, 59 kDa	
	Observed MW: 57-62 kDa	

Applications

Tested Applications: WB, IF/ICC, FC (Intra), ELISA	Positive Controls:
Species Specificity: Human, pig	WB : Jurkat cells, Raji cells, Ramos cells IF/ICC : HepG2 cells,

Background Information

Recombination activating gene 2(RAG2) is core part of the RAG complex(RAG1 and RAG2), which mediates the DNA cleavage phase during V(D)J recombination. The RAG complex also plays a role in pre-B cell allelic exclusion, a process leading to expression of a single immunoglobulin heavy chain allele to enforce clonality and monospecific recognition by the B-cell antigen receptor (BCR) expressed on individual B-lymphocytes. The introduction of DNA breaks by the RAG complex on one immunoglobulin allele induces ATM-dependent repositioning of the other allele to pericentromeric heterochromatin, preventing accessibility to the RAG complex and recombination of the second allele. In the RAG complex, RAG2 is not the catalytic component but is required for all known catalytic activities mediated by RAG1. It probably acts as a sensor of chromatin state that recruits the RAG complex to H3K4me3

Storage

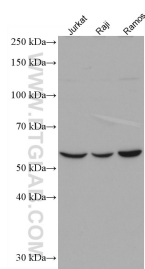
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

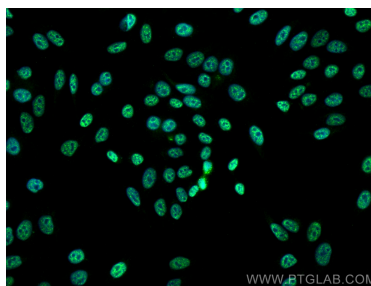
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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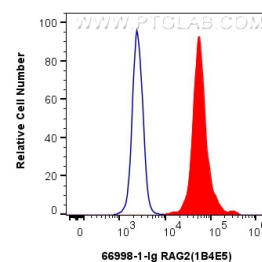
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66998-1-Ig (RAG2 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using RAG2 antibody (66998-1-Ig, Clone: 1B4E5) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



1x10⁶ HepG2 cells were intracellularly stained with 0.4 ug Anti-Human RAG2 (66998-1-Ig, Clone:1B4E5) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 isotype control Mouse McAb (66360-1-Ig, Clone: 1F8D3) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).