

For Research Use Only

RAG2 Polyclonal antibody

Catalog Number: 11825-1-AP **2 Publications**



Basic Information

Catalog Number: 11825-1-AP	GenBank Accession Number: BC022397	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 200 µg/ml by Nanodrop and 193 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 5897	Recommended Dilutions: WB 1:200-1:1000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:20-1:200 IF 1:10-1:100
Source: Rabbit	Full Name: recombination activating gene 2	
Isotype: IgG	Calculated MW: 527 aa, 59 kDa	
Immunogen Catalog Number: AG2393	Observed MW: 57-62 kDa	

Applications

Tested Applications: FC, IF, IHC, IP, WB, ELISA	Positive Controls: WB : A375 cells, mouse thymus tissue IP : A375 cells, IHC : human lymphoma tissue, IF : HeLa cells,
Cited Applications: WB	
Species Specificity: human, mouse	
Cited Species: mouse	
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

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

Notable Publications

Author	Pubmed ID	Journal	Application
Tomas Zelenka	36376298	Nat Commun	WB
Jannek Hauser	24470503	J Immunol	WB

Storage

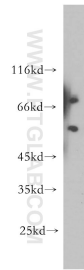
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

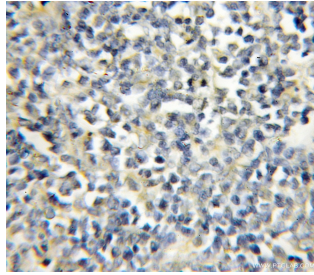
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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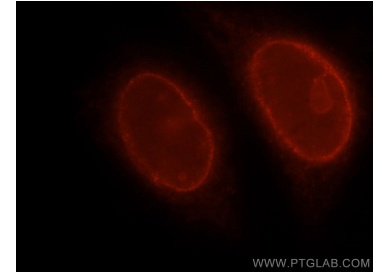
Selected Validation Data



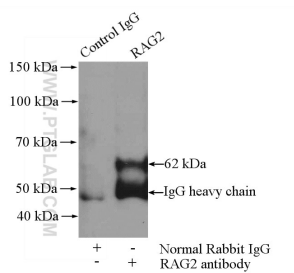
A375 cells were subjected to SDS PAGE followed by western blot with 11825-1-AP (RAG2 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



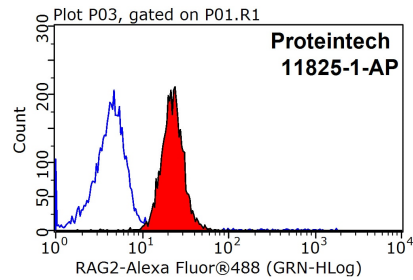
Immunohistochemical analysis of paraffin-embedded human lymphoma using 11825-1-AP (RAG2 antibody) at dilution of 1:50 (under 10x lens).



Immunofluorescent analysis of HeLa cells, using RAG2 antibody 11825-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



IP Result of anti-RAG2 (IP:11825-1-AP, 4 μ g; Detection:11825-1-AP 1:300) with A375 cells lysate 3600 μ g.



1X10⁶ HeLa cells were stained with 0.2 μ g RAG2 antibody (11825-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.