

For Research Use Only

# RAG2 Polyclonal antibody

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



## Basic Information

<b>Catalog Number:</b> 11825-1-AP	<b>GenBank Accession Number:</b> BC022397	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 400 µg/ml	<b>GeneID (NCBI):</b> 5897	<b>Recommended Dilutions:</b> WB 1:200-1:1000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P55895	IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate
<b>Isotype:</b> IgG	<b>Full Name:</b> recombination activating gene 2	IHC 1:20-1:200
<b>Immunogen Catalog Number:</b> AG2393	<b>Calculated MW:</b> 527 aa, 59 kDa	IF 1:10-1:100
	<b>Observed MW:</b> 57-62 kDa	

## Applications

<b>Tested Applications:</b> FC, IF/ICC, IHC, IP, WB, ELISA	<b>Positive Controls:</b> WB : A375 cells, mouse thymus tissue
<b>Cited Applications:</b> WB	IP : A375 cells,
<b>Species Specificity:</b> human, mouse, rat	IHC : human lymphoma tissue,
<b>Cited Species:</b> mouse	IF : HeLa cells,

**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

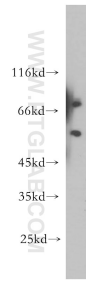
## Storage

**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

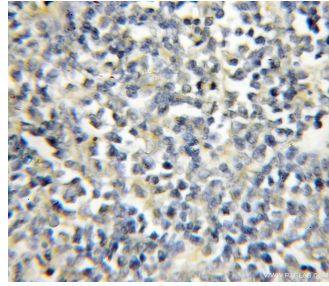
For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

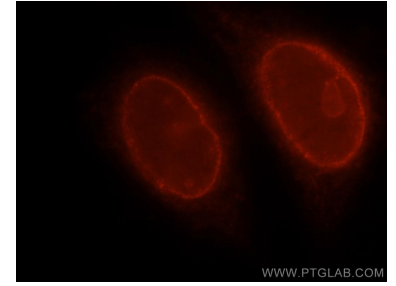
## Selected Validation Data



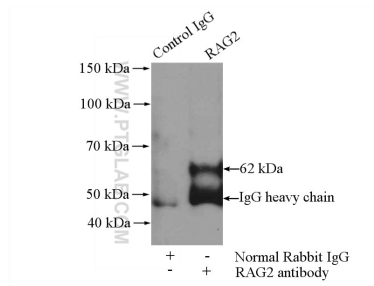
A375 cells were subjected to SDS PAGE followed by western blot with 11825-1-AP (RAG2 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



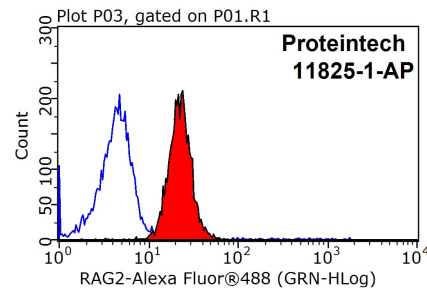
Immunohistochemical analysis of paraffin-embedded human lymphoma using 11825-1-AP (RAG2 antibody) at dilution of 1:50 (under 10x lens).



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, 4ug; Detection:11825-1-AP 1:300) with A375 cells lysate 3600ug.



1X10<sup>6</sup> HeLa cells were stained with 0.2ug 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.