

For Research Use Only

# RAG2 Monoclonal antibody, PBS Only



Catalog Number: 66998-1-PBS

## Basic Information

|   |  |   |
|---|--|---|
| <b>Catalog Number:</b><br>66998-1-PBS       | <b>GenBank Accession Number:</b><br>BC022397         | <b>Purification Method:</b><br>Protein A purification |
| <b>Size:</b><br>1mg/ml                      | <b>GeneID (NCBI):</b><br>5897                        | <b>CloneNo.:</b><br>1B4E5                             |
| <b>Source:</b><br>Mouse                     | <b>UNIPROT ID:</b><br>P55895                         |   |
| <b>Isotype:</b><br>IgG1                     | <b>Full Name:</b><br>recombination activating gene 2 |   |
| <b>Immunogen Catalog Number:</b><br>AG16780 | <b>Calculated MW:</b><br>527 aa, 59 kDa              |   |
|   | <b>Observed MW:</b><br>57-62 kDa                     |   |

## Applications

**Tested Applications:**  
WB, IF/ICC, Indirect ELISA

**Species Specificity:**  
Human, pig

## 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 -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS Only

For technical support and original validation data for this product please contact:

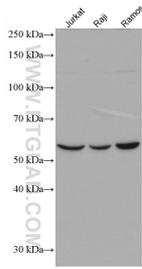
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

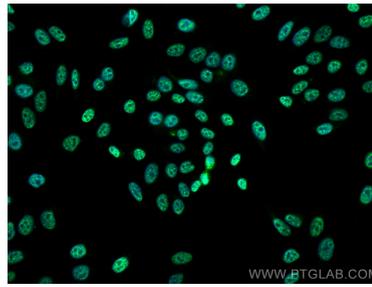
W: [ptgcn.com](http://ptgcn.com)

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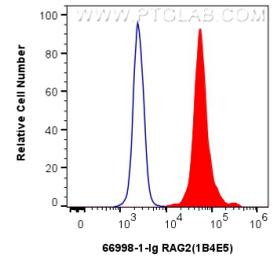
## Selected Validation Data



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. This data was developed using the same antibody clone with 66998-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 66998-1-PBS in a different storage buffer formulation.



1x10<sup>6</sup> 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). This data was developed using the same antibody clone with 66998-1-PBS in a different storage buffer