

# CoraLite®555-conjugated RAG2

## Monoclonal antibody

Catalog Number: **CL555-66998**

### Basic Information

Catalog Number: <b>CL555-66998</b>	GenBank Accession Number: <b>BC022397</b>	Purification Method: <b>Protein G purification</b>
Size: <b>1000 µg/ml</b>	GeneID (NCBI): <b>5897</b>	CloneNo.: <b>1B4E5</b>
Source: <b>Mouse</b>	UNIPROT ID: <b>P55895</b>	Excitation/Emission maxima wavelengths: <b>557 nm / 570 nm</b>
Isotype: <b>IgG1</b>	Full Name: <b>recombination activating gene 2</b>	
Immunogen Catalog Number: <b>AG16780</b>	Calculated MW: <b>527 aa, 59 kDa</b>	
	Observed MW: <b>57-62 kDa</b>	

### Applications

Tested Applications:  
**FC (Intra)**

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

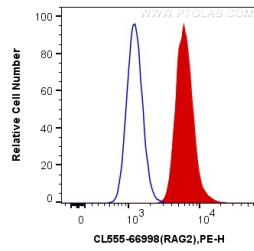
### Storage

Storage:  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4 ug CoraLite®555 Anti-Human RAG2 (CL555-66998, Clone:1B4E5) (red), or 0.4 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).