For Research Use Only

## CoraLite®555-conjugated RAG2 Monoclonal antibody

Catalog Number: CL555-66998



**Basic Information** 

Catalog Number: GenBank Accession Number: BC022397

CL555-66998 Protein G purification GeneID (NCBI): CloneNo.:

100ul, Concentration: 1000 ug/ml by 5897 1B4E5 Nanodrop:

**UNIPROT ID:** Recommended Dilutions: P55895 FC (Intra): 0.40 ug per 10^6 cells in a

Mouse Full Name:

Isotype: recombination activating gene 2

lgG1 Calculated MW: Immunogen Catalog Number: 527 aa, 59 kDa

AG16780 Observed MW:

57-62 kDa

wavelengths: 557 nm / 570 nm

100 ul suspension

Excitation/Emission maxima

**Purification Method:** 

**Applications** 

**Tested Applications:** 

FC (Intra)

Species Specificity: human, pig

Positive Controls:

FC (Intra): 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

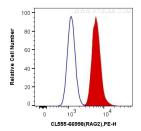
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



1X10^6 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).