For Research Use Only

## CoraLite® Plus 488-conjugated RAG2 Monoclonal antibody



**Purification Method:** 

Catalog Number: CL488-66998

**Basic Information** 

Catalog Number: GenBank Accession Number:

CL488-66998 Protein G purification BC022397

GeneID (NCBI): CloneNo.: 100ul, Concentration: 1000 µg/ml by 5897 1B4E5

Recommended Dilutions:

Source: recombination activating gene 2 IF 1:50-1:500 Mouse

Excitation/Emission maxima Calculated MW: wavelengths: Isotype: 527 aa, 59 kDa 493 nm / 522 nm lgG1

Immunogen Catalog Number:

AG16780

**Applications** 

**Tested Applications:** FC (Intra), IF

Species Specificity: Human, pig

Positive Controls:

IF: HeLa 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, pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

in USA), or 1(312) 455-8498 (outside USA)

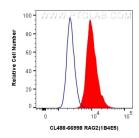
E: proteintech@ptglab.com W: ptglab.com

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

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CoraLite® Plus 488 RAG2 antibody (CL488-66998, Clone: 1B4E5) at dilution of 1:200.



1x10^6 HepG2 cells were intracellularly stained with 0.4 ug Coralite® Plus 488 Anti-Human RAG2 (CL488-66998, Clone:1B4E5) (red), or 0.4 ug Coralite® Plus 488 Mouse IgG1 Isotype Control (1F8D3) (CL488-66360-1, Clone: 1F8D3) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).