For Research Use Only

CoraLite® Plus 488-conjugated RAG2 Monoclonal antibody

Catalog Number:

CL488-66998



Purification Method:

Protein G purification

IF/ICC 1:300-1:1200

wavelengths: 493 nm / 522 nm

Excitation/Emission maxima

Catalog Number: CL488-66998

Basic Information

GenBank Accession Number:

BC022397

GeneID (NCBI): CloneNo.:

100ul , Concentration: 1000 μ g/ml by 5897 1B4E5 Nanodrop: **UNIPROT ID:** Recommended Dilutions:

P55895 Mouse Full Name:

Isotype: recombination activating gene 2

lgG1 Calculated MW:

Immunogen Catalog Number: 527 aa, 59 kDa

AG16780

Applications

Tested Applications: IF/ICC, FC (Intra)

Species Specificity: Human, pig

Positive Controls:

IF/ICC: 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

Storage:

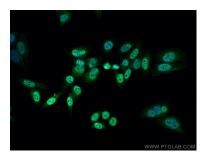
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

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

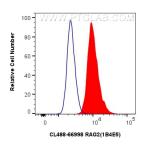
Aliquoting is unnecessary for -20°C storage

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

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Coralite® Plus 488 RAG2 antibody (CL488-66998, Clone: 1B4E5) at dilution of 1:600.



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).