

CoraLite® Plus 488-conjugated RRM1 Monoclonal antibody

Catalog Number: **CL488-60073**

Basic Information

Catalog Number:

CL488-60073

Size:

1000 µg/ml

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG0789

GenBank Accession Number:

BC006498

GeneID (NCBI):

6240

UNIPROT ID:

P23921

Full Name:

ribonucleotide reductase M1

Calculated MW:

90 kDa

Observed MW:

90 kDa

Purification Method:

Protein A purification

CloneNo.:

5H6F3

Recommended Dilutions:

IF-P 1:50-1:500

IF/ICC 1:50-1:500

**Excitation/Emission maxima
wavelengths:**

493 nm / 522 nm

Applications

Tested Applications:

IF/ICC, IF-P, FC (Intra)

Species Specificity:

human

Positive Controls:

IF-P : human breast cancer tissue,

IF/ICC : HepG2 cells,

Background Information

Ribonucleoside-diphosphate reductase functions as a heterodimer of a large and a small subunits in deoxyribonucleotide synthesis. RRM1 constitutes to the large subunit (R1) of ribonucleotide reductase, and it can either form heterodimer with small subunit RRM or RRM2B(PMID:16376858). RRM1 provides the precursors necessary for DNA synthesis. RRM1 can not be detected in quiescent cells, while its mRNA and protein are present throughout the cell cycle in cycling cells(PMID:8188248). Researches showed that RRM1 is involved in carcinogenesis, tumor progression, and the resistance of non-small-cell lung cancer (NSCLC) to treatment. Low level expression of RRM1 in NSCLC is associated with poor survival(PMID:17314339).

Storage

Storage:

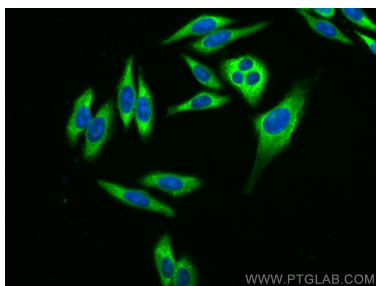
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

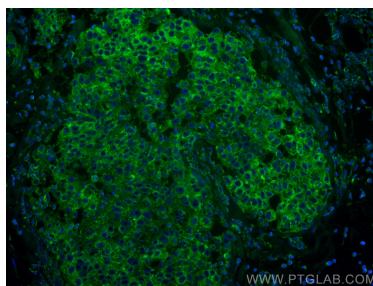
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

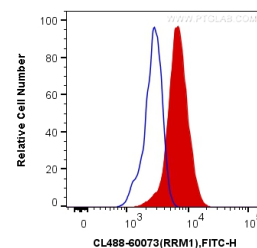
Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using CoraLite® Plus 488 RRM1 antibody (CL488-60073, Clone: 5H6F3) at dilution of 1:200.



Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using CoraLite® Plus 488 RRM1 antibody (CL488-60073, Clone: 5H6F3) at dilution of 1:200.



1X10⁶ HepG2 cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human RRM1 (CL488-60073, Clone:5H6F3) (red), or 0.4 ug Mouse IgG2b Isotype Control (CL488-66360-3, Clone: K11B8C4B5) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).