

# CoraLite®594-conjugated RRM1 Monoclonal antibody

Catalog Number: **CL594-60073**

## Basic Information

**Catalog Number:**

CL594-60073

**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:**

588 nm / 604 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:**

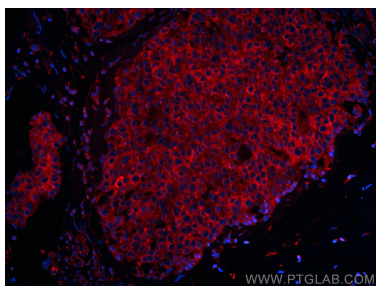
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

**Storage Buffer:**

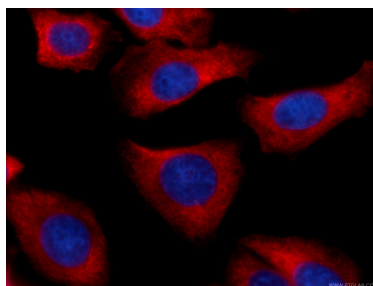
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

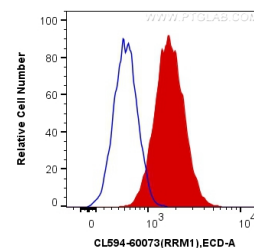
## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using CoraLite®594 RRM1 antibody (CL594-60073, Clone: 5H6F3) at dilution of 1:200.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using CL594-60073 (RRM1) antibody at dilution of 1:100.



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4 ug CoraLite®594 Anti-Human RRM1 (CL594-60073, Clone:5H6F3) (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).