Anti- RRM2 / RNR-R2 antibody, affinity purified (rabbit polyclonal)

70-050　100 μg

Ribonucleoside-diphosphate reductase subunit M2 (RRM2; 389 aa, 45 kDa) also known as ribonucleotide reductase subunit R2 (RNR-R2), is a rate-limiting subunit of an enzyme that catalyzes the formation of deoxyribonucleotides from ribonucleotides. Deoxyribonucleotides in turn are used in the synthesis of DNA. The reaction catalyzed by RNR is strictly conserved in all living organisms. Furthermore RNR plays a critical role in regulating the total rate of DNA synthesis so that DNA to cell mass is maintained at a constant ratio during cell division and DNA repair.

Applications

1) Western blotting (~ 1/1,000 dilution)

2) Immunofluorescence staining

Not tested for other applications

Reactivity: Reacts with human, mouse, rat and Xenopus RRM2. Not tested with other species

Immunogen: C-terminal peptide of Human and Mouse RRM2,

C-TENSFTLDADF, conjugated with KLH

Purity: Affinity-purified with the immunogen peptide

Form: 1mg/ml in PBS, 50% glycerol. Filter-sterilized. Azide and carrier free.

Storage: Shipped at 4℃. Upon arrival, aliquot and store at -20℃

Data Link　UniProtKB/Swiss-Prot P31350 (RIR2_HUMAN)

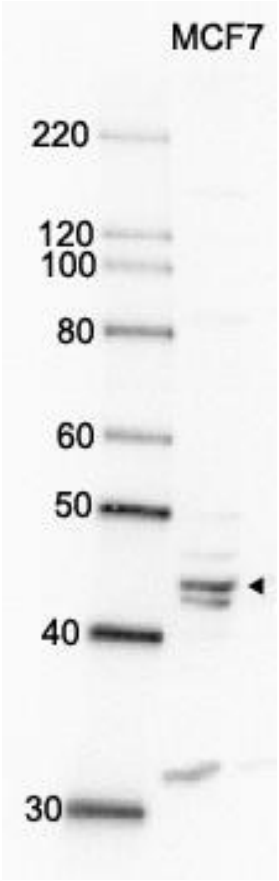


Fig.1 Western blot analysis of RRM2 (45 kDa) in the whole cell extracts of MCF7 (Breast cancer cell line). Extract (,20μg). Antibody was 1,000-fold diluted. RRM2 is phosphorylated at three residues and the multiple bands correspond to them.

Reference : This product was described and used in the following publication.

Takada S. et al. Identification of ribonucleotide reductase protein R1 as an activator of microtubule nucleation in Xenopus egg mitotic extracts. Mol Biol. Cell 11,: 41734187 (2000) WB
PMID: 11102516

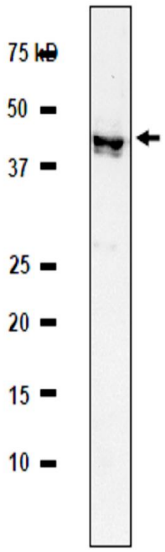
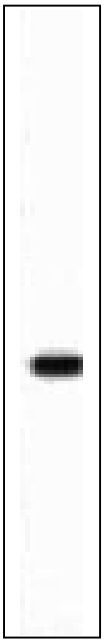


Fig. 2 Western blot analysis of RRM2 protein in the whole cell extract of HeLa Extract (20 μg). Anti-RRM2 antibody was used at 1/2000 dilution.



45kD

Fig. 3 Western blot analysis of RRM2 protein in mitotic extract of Xenopus egg. Anti-RRM2 antibody was used at 1/1,000 dilution

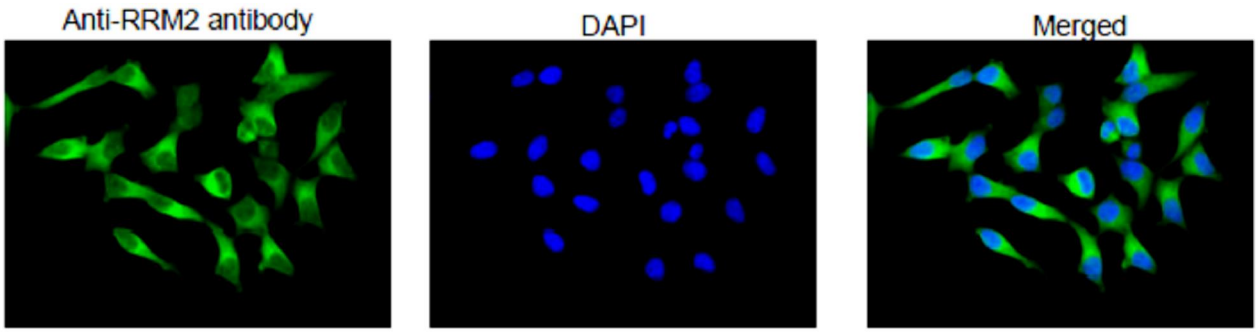


Fig.4 Immunofluorescence staining of RRM2 protein in MCF cells with anti-RRM2 antibody. MCF7 cells were fixed with 4%PFA and permeabilized with 0.25% TritonX 100 and reacted with anti-RRM2 antibody at 1/100 dilution. As the second antibody, anti-rabbit IgG antibody conjugated with Alexa Fluor 488 (Abcam) was used at 1/1,000 dilution. DNA was stained with 1.0 μg/mL DAPI in TBS.