

## RRM2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58604

## **Product Information**

**Application** WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>P31350</u>

**Reactivity** Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 44878
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human RRM2

Epitope Specificity 151-250/389

**Isotype** IgG

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

**SUBCELLULAR LOCATION** Cytoplasm.

**SIMILARITY** Belongs to the ribonucleoside diphosphate reductase small chain family.

**SUBUNIT** Heterodimer of a large and a small subunit.

**Post-translational** Phosphorylation on Ser-20 relieves the inhibitory effect on Wnt signaling. **modifications** 

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** Ribonucleotide reductase is essential for the production and maintenance of

the level of deoxyribonucleoside triphosphates (dNTPs) required for DNA synthesis. It is an enzymatic complex consisting of two nonidentical subunits, R1 and R2, which are inactive separately. R2, the smaller subunit, is localized to the cytoplasm. R2 is the limiting factor of the catalytic activity of the ribonucleotide reductase enzymatic complex. R2 expression is strictly correlated to the S-phase of the cell cycle, whereas R1 remains constant throughout all phases of the cell cycle. While R2 seems to be involved solely in the maintenance of dNTPs for DNA replication, a similar protein, p53R2, has been shown to be responsible for the production of dNTPs in response to DNA damage. Function: Provides the precursors necessary for DNA synthesis. Catalyzes the biosynthesis of deoxyribonucleotides from the corresponding

ribonucleotides. Inhibits Wnt signaling.

## **Additional Information**

**Gene ID** 6241

Other Names Ribonucleoside-diphosphate reductase subunit M2, 1.17.4.1, Ribonucleotide

reductase small chain, Ribonucleotide reductase small subunit, RRM2, RR2

**Dilution** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50

0,ELISA=1:5000-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

## **Protein Information**

Name RRM2

Synonyms RR2

**Function** Provides the precursors necessary for DNA synthesis. Catalyzes the

biosynthesis of deoxyribonucleotides from the corresponding

ribonucleotides. Inhibits Wnt signaling.

**Cellular Location** Cytoplasm. Nucleus. Note=Localized to the cytoplasm in S phase cells. May

localize to the nucleus in G2 phase cells

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.