

## **RRM2B Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17054c

### **Specification**

# **RRM2B** Antibody (Center) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q7LG56</u> <u>Q6PEE3</u>, <u>Q4R741</u>, <u>NP\_001165948.1</u>, <u>NP\_001165949.1</u> Human Monkey, Mouse Rabbit Polyclonal Rabbit IgG 40737 128-157

## **RRM2B** Antibody (Center) - Additional Information

#### Gene ID 50484

## **Other Names**

Ribonucleoside-diphosphate reductase subunit M2 B, TP53-inducible ribonucleotide reductase M2 B, p53-inducible ribonucleotide reductase small subunit 2-like protein, p53R2, RRM2B, P53R2

#### Target/Specificity

This RRM2B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 128-157 amino acids from the Central region of human RRM2B.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

#### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

RRM2B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## **RRM2B** Antibody (Center) - Protein Information



## Name RRM2B

# Synonyms P53R2

**Function** Plays a pivotal role in cell survival by repairing damaged DNA in a p53/TP53-dependent manner. Supplies deoxyribonucleotides for DNA repair in cells arrested at G1 or G2. Contains an iron-tyrosyl free radical center required for catalysis. Forms an active ribonucleotide reductase (RNR) complex with RRM1 which is expressed both in resting and proliferating cells in response to DNA damage.

### **Cellular Location**

Cytoplasm. Nucleus. Note=Translocates from cytoplasm to nucleus in response to DNA damage

## **Tissue Location**

Widely expressed at a high level in skeletal muscle and at a weak level in thymus. Expressed in epithelial dysplasias and squamous cell carcinoma.

# **RRM2B Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# RRM2B Antibody (Center) - Images



RRM2B Antibody (Center) (Cat. #AP17054c) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the RRM2B antibody detected the RRM2B protein (arrow).

## **RRM2B Antibody (Center) - Background**



This gene encodes the small subunit of a p53-inducible ribonucleotide reductase. This heterotetrameric enzyme catalyzes the conversion of ribonucleoside diphosphates to deoxyribonucleoside diphosphates. The product of this reaction is necessary for DNA synthesis. Mutations in this gene have been associated with autosomal recessive mitochondrial DNA depletion syndrome, autosomal dominant progressive external ophthalmoplegia-5, and mitochondrial neurogastrointestinal encephalopathy. Alternatively spliced transcript variants have been described.

# **RRM2B Antibody (Center) - References**

Zhou, B., et al. Mol. Cancer Ther. 9(6):1669-1679(2010) Smith, P., et al. Biochemistry 48(46):11134-11141(2009) Shaibani, A., et al. Arch. Neurol. 66(8):1028-1032(2009) Tyynismaa, H., et al. Am. J. Hum. Genet. 85(2):290-295(2009) Kollberg, G., et al. Neuromuscul. Disord. 19(2):147-150(2009)