10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-p53R2 Antibody
Catalog # ABO11361

Specification

Anti-p53R2 Antibody - Product Information

Application	**WB**
Primary Accession	Q7LG56
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Ribonucleoside-diphosphate reductase subunit M2 B(RRM2B) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-p53R2 Antibody - Additional Information

Gene ID 50484

Other Names
Ribonucleoside-diphosphate reductase subunit M2 B, 1.17.4.1, TP53-inducible ribonucleotide reductase M2 B, p53-inducible ribonucleotide reductase small subunit 2-like protein, p53R2, RRM2B, P53R2

Calculated MW
40737 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization
Cytoplasm. Nucleus. Translocates from cytoplasm to nucleus in response to DNA damage.

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

Protein Name
Ribonucleoside-diphosphate reductase subunit M2 B

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human p53R2(318-332aa EGKTNFFEKRVSEYQ), identical to the related rat and mouse sequences.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Belongs to the ribonucleoside diphosphate reductase small chain family.

Anti-p53R2 Antibody - 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.

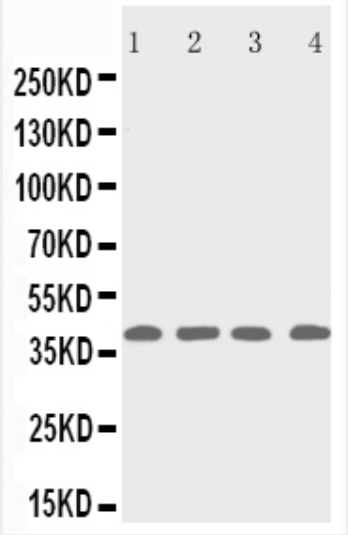
Anti-p53R2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-p53R2 Antibody - Images

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Anti-p53R2 antibody, ABO11361, Western blottingLane 1: Rat Thymus Tissue LysateLane 2: MCF-7 Cell LysateLane 3: A431 Cell LysateLane 4: HELA Cell Lysate

Anti-p53R2 Antibody - Background

RRM2B(Ribonucleotide Reductase, M2 B), also known as P53R2, is an enzyme that in humans is encoded by the RRM2B gene. Tanaka et al.(2000) mapped the p53R2 gene to chromosome 8q23.1 by fluorescence in situ hybridization. Tanaka et al.(2000) found that expression of p53R2, but not R2, was induced by ultraviolet and gamma-irradiation and adriamycin treatment in a wildtype p53-dependent manner. Induction of p53R2 in p53-deficient cells caused G2/M arrest and protected cells from death in response to adriamycin. Inhibition of endogenous p53R2 expression in cells that had an intact p53-dependent DNA damage checkpoint reduced ribonucleotide reductase activity, DNA repair, and cell survival after exposure to various genotoxins.