

p53R2 Polyclonal Antibody

Catalog No: YT3543

Reactivity: Human; Mouse; Rat

Applications: WB;ELISA

Target: p53R2

Fields: >>Purine metabolism;>>Pyrimidine metabolism;>>Glutathione

metabolism;>>Drug metabolism - other enzymes;>>Metabolic pathways;>>Nucleotide metabolism;>>p53 signaling pathway

Gene Name: RRM2B

Protein Name: Ribonucleoside-diphosphate reductase subunit M2 B

Q7LG56

Q6PEE3

Human Gene Id: 50484

Human Swiss Prot

No:

Mouse Gene ld: 382985

Mouse Swiss Prot

No:

Immunogen: Synthesized peptide derived from the Internal region of human p53R2.

Specificity: p53R2 Polyclonal Antibody detects endogenous levels of p53R2 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. ELISA: 1:40000. Not yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 40kD

Cell Pathway: Purine metabolism;Pyrimidine metabolism;Glutathione metabolism;p53;

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.[provided by RefSeq, Feb 2010],

Function: catalytic activity:2'-deoxyribonucleoside diphosphate + thioredoxin disulfide +

H(2)O = ribonucleoside diphosphate + thioredoxin.,cofactor:Binds 2 iron ions per

subunit., disease: Defects in RRM2B are the cause of encephalomyopathic mitochondrial depletion syndrome with renal tubulopathy (EMDSRT)

[MIM:612075]. Mitochondrial DNA depletion syndrome (MDS) is a clinically heterogeneous group of disorders characterized by a reduction in mitochondrial

DNA (mtDNA) copy number. The encephalomyopathic form with renal

tubulopathy is presented with various combinations of hypotonia, tubulopathy, seizures, respiratory distress, diarrhea, and lactic acidosis.,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

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

Expression:

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

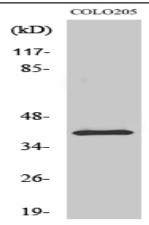
Sort: 11500

Host: Rabbit

Modifications: Unmodified

Products Images

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Western Blot analysis of various cells using p53R2 Polyclonal Antibody diluted at 1:2000