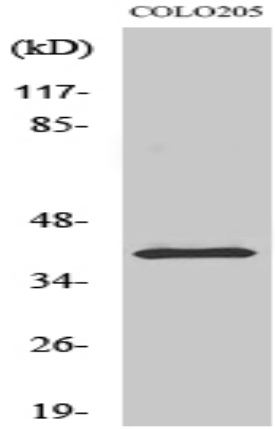
Best Tools for immunology Research

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
Human Gene Id :	50484
Human Swiss Prot No :	Q7LG56
Mouse Gene Id :	382985
Mouse Swiss Prot No :	Q6PEE3
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

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 Location :	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.

Products Images



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