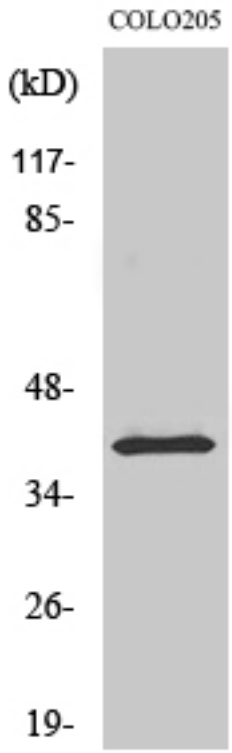
p53R2 Polyclonal Antibody

Catalog No	BYab-16765
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	RRM2B
Protein Name	Ribonucleoside-diphosphate reductase subunit M2 B
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	RRM2B; P53R2; Ribonucleoside-diphosphate reductase subunit M2 B; TP53-inducible ribonucleotide reductase M2 B; p53-inducible ribonucleotide reductase small subunit 2-like protein; p53R2
Observed Band	40kD
Cell Pathway	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.
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
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



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