



Mouse Anti-Human p53R2 monoclonal antibody, clone NN22 (CABT-ZB811)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	It reacts with Human p53R2
Target	RRM2B
Immunogen	Recombinant Human RRM2B/P53R2 Protein
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	NN22
Purification	Protein A purified
Conjugate	Unconjugated
Applications	ELISA(cap) We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB811 - CABT-ZB1102 This antibody will detect p53R2 in antibody pair set. [ABPR-ZB391]
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human RRM2B / P53R2. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Format	Purified, Liquid
Concentration	Lot specific

Size	50 µL, 100 µL, 200 µL, 1 mL
Buffer	PBS
Preservative	None
Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Ship	Wet ice

BACKGROUND

Introduction	Ribonucleoside reductase subunit M2B, also known as RRM2B or p53R2, is an enzyme belonging to the iron-dependent ribonucleotide reductase (RNR) enzyme family which is essential for DNA synthesis. Ribonucleotide reductase (RNR) is an enzyme that catalyzes the formation of deoxyribonucleotides from ribonucleotides and plays a critical role in regulating the total rate of DNA synthesis so that DNA to cell mass is maintained at a constant ratio during cell division and DNA repair. RRM2B is a phosphorylated protein. It is hypothesized that RRM2B activity can be regulated at the posttranslational level in response to DNA damage. RRM2B has previously been shown to be essential for the maintenance of mtDNA copy number and its candidacy for tumor suppression has been evaluated in several mutational analyses of different cancer types. However, the contribution of RRM2B to the DNA damage response has been questioned because its transcriptional induction upon DNA damage is not rapid enough for prompt DNA repair. Instead, ATM-mediated phosphorylation has been suggested to regulate the DNA repair activity of RRM2B posttranslationally. Besides, a defect in RRM2B can induce a mild muscle disease of adult onset through disturbance of mitochondrial homeostasis but that this defect does not appear to be oncogenic.
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Keywords	RRM2B; ribonucleotide reductase M2 B (TP53 inducible); P53R2; MTDPS8A
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GENE INFORMATION

Synonyms	RRM2B; ribonucleotide reductase M2 B (TP53 inducible); P53R2; MTDPS8A; MTDPS8B; ribonucleoside-diphosphate reductase subunit M2 B; TP53-inducible ribonucleotide reductase M2 B; p53-inducible ribonucleotide reductase small subunit 2 homolog; p53-inducible ribonucleotide reductase small subunit 2-like protein; p53-inducible ribonucleotide reductase small subunit 2 short form beta
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Entrez Gene ID	50484
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UniProt ID	Q7LG56
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