

RRM2B Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP17054c

Specification

RRM2B Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>Q7LG56</u>

RRM2B Antibody (Center) Blocking Peptide - Additional Information

Gene ID 50484

Other Names

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RRM2B Antibody (Center) Blocking Peptide - 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.

RRM2B Antibody (Center) Blocking Peptide - Protocols



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

<u>Blocking Peptides</u>

RRM2B Antibody (Center) Blocking Peptide - Images

RRM2B Antibody (Center) Blocking Peptide - Background

This gene encodes the small subunit of a p53-inducibleribonucleotide reductase. This heterotetrameric enzyme catalyzesthe conversion of ribonucleoside diphosphates todeoxyribonucleoside diphosphates. The product of this reaction isnecessary for DNA synthesis. Mutations in this gene have beenassociated with autosomal recessive mitochondrial DNA depletionsyndrome, autosomal dominant progressive externalophthalmoplegia-5, and mitochondrial neurogastrointestinalencephalopathy. Alternatively spliced transcript variants have beendescribed.

RRM2B Antibody (Center) Blocking Peptide - References

Zhou, B., et al. Mol. Cancer Ther. 9(6):1669-1679(2010)Smith, P., et al. Biochemistry 48(46):11134-11141(2009)Shaibani, A., et al. Arch. Neurol. 66(8):1028-1032(2009)Tyynismaa, H., et al. Am. J. Hum. Genet. 85(2):290-295(2009)Kollberg, G., et al. Neuromuscul. Disord. 19(2):147-150(2009)