



Anti-RRM2B (Ribonucleoside-diphosphate reductase subunit M2B) Phospho- Polyclonal Antibody

Category: Phospho-Polyclonal Antibody

Catalog #: Phospho-AB1L141(phospho Site: 72S)

Antigen Synonym: P53R2(p53-inducible ribonucleotide reductase small subunit 2-like protein)

Species Reactivity: Human, Mouse

Immunogen/Specificity:

Polyclonal antibody produced in rabbits immunizing with a synthetic peptide corresponding to N-terminal residues of human RRM2B (Ribonucleoside-diphosphate reductase subunit M2B)

Description: RRM2B (Ribonucleoside-diphosphate reductase subunit M2B) plays a pivotal role in cell survival by repairing damaged DNA in a p53/TP53-dependent manner. RRM2B supplies deoxyribonucleotides for DNA repair in cells arrested at G1 or G2. RRM2B 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. RRM2B binds 2 iron ions per subunit. RRM2B interacts with p53/TP53 and interacts with RRM1 in response to DNA damage. RRM2B is widely expressed at a high level in skeletal muscle and at a weak level in thymus. Defects in RRM2B are the cause of encephalomyopathic mitochondrial depletion syndrome with renal tubulopathy (EMDSRT)

Reference:

Tanaka, H., et al, Nature 404 (6773), 42-49 (2000)
Bechtel, S., et al, BMC Genomics 8, 399 (2007)
Guittet, O., et al, J. Biol. Chem. 276 (44), 40647-40651 (2001)
Yamaguchi, T., et al, Cancer Res. 61 (22), 8256-8262 (2001)
Xue, L., et al, Cancer Res. 63 (5), 980-986 (2003)
Zhou, B., et al, Cancer Res. 63 (20), 6583-6594 (2003)
Bourdon, A., et al, Nat. Genet. 39 (6), 776-780 (2007)
Bornstein, B., et al, Neuromuscul. Disord. 18 (6), 453-459 (2008)