

# Anti-DDX5 Antibody

Catalog # ABO11271

### Specification

## Anti-DDX5 Antibody - Product Information

Application Primary Accession Host Reactivity Clonality Format **Description** Babbit InG polyclona WB, IHC-P <u>P17844</u> Rabbit Human, Mouse, Rat Polyclonal Lyophilized

Rabbit IgG polyclonal antibody for Probable ATP-dependent RNA helicase DDX5(DDX5) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### **Anti-DDX5 Antibody - Additional Information**

Gene ID 1655

Other Names Probable ATP-dependent RNA helicase DDX5, 3.6.4.13, DEAD box protein 5, RNA helicase p68, DDX5, G17P1, HELR, HLR1

Calculated MW 69148 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, Rat, Mouse, By Heat<br>br>Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat<br>br>

Subcellular Localization Nucleus, nucleolus.

Protein Name Probable ATP-dependent RNA helicase DDX5

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

**Immunogen** A synthetic peptide corresponding to a sequence at the C-terminus of human DDX5(566-580aa TYQNGYDSTQQYGSN), identical to the related rat and mouse sequences.

**Purification** Immunogen affinity purified.



**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the DEAD box helicase family. DDX5/DBP2 subfamily.

### Anti-DDX5 Antibody - Protein Information

Name DDX5

Synonyms G17P1, HELR, HLR1

#### Function

Involved in the alternative regulation of pre-mRNA splicing; its RNA helicase activity is necessary for increasing tau exon 10 inclusion and occurs in a RBM4-dependent manner. Binds to the tau pre-mRNA in the stem-loop region downstream of exon 10. The rate of ATP hydrolysis is highly stimulated by single-stranded RNA. Involved in transcriptional regulation; the function is independent of the RNA helicase activity. Transcriptional coactivator for androgen receptor AR but probably not ESR1. Synergizes with DDX17 and SRA1 RNA to activate MYOD1 transcriptional activity and involved in skeletal muscle differentiation. Transcriptional coactivator for p53/TP53 and involved in p53/TP53 transcriptional response to DNA damage and p53/TP53- dependent apoptosis. Transcriptional coactivator for RUNX2 and involved in regulation of osteoblast differentiation. Acts as a transcriptional repressor in a promoter-specific manner; the function probably involves association with histone deacetylases, such as HDAC1. As component of a large PER complex is involved in the inhibition of 3' transcriptional termination of circadian target genes such as PER1 and NR1D1 and the control of the circadian rhythms.

#### **Cellular Location**

Nucleus. Nucleus, nucleolus Nucleus speckle. Cytoplasm. Note=During the G0 phase, predominantly located in the nucleus. Cytoplasmic levels increase during the G1/S phase. During the M phase, located at the vicinity of the condensed chromosomes. At G1, localizes in the cytoplasm

#### **Anti-DDX5 Antibody - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-DDX5 Antibody - Images





Anti-DDX5 antibody, ABO11271, Western blottingAll lanes: Anti DDX5 (ABO11271) at 0.5ug/mlLane 1: Rat Testis Tissue Lysate at 50ugLane 2: Mouse Testis Tissue Lysate at 50ugLane 3: HELA Whole Cell Lysate at 40ugLane 4: MCF-7 Whole Cell Lysate at 40ugLane 5: NIH3T3 Whole Cell Lysate at 40ugLane 6: SKOV Whole Cell Lysate at 40ugLane 7: MM231 Whole Cell Lysate at 40ugPredicted bind size: 69KDObserved bind size: 69KD



Anti-DDX5 antibody, ABO11271, IHC(P)IHC(P): Rat Brain Tissue

### Anti-DDX5 Antibody - Background

DDX5(DEAD/H BOX 5), also known as HLR1 or G17P1, is an enzyme that in humans is encoded by the DDX5 gene. The p68 protein is a proliferation-associated nuclear antigen first identified through its highly specific cross-reaction with the simian virus 40 tumor antigen(Iggo et al., 1989). Subsequently, homology to eukaryotic translation initiation factor was found, and amino acid sequence blocks characteristic of a large superfamily of proteins with putative helicase activity were demonstrated. Brody et al.(1995) confirmed that this gene is located on chromosome 17 in the region of the BRCA1 gene at 17q21. By immunoprecipitation analysis, Caretti et al.(2006) found that p68, p72(DDX17), and the noncoding RNA SRA(SRA1) associated with MYOD(MYOD1) in MYOD-transfected HeLa cells.