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Goat Anti-DDX5 / p68 RNA helicase Antibody

Peptide-affinity purified goat antibody
Catalog # AF1311a

Specification

Goat Anti-DDX5 / p68 RNA helicase Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P17844
Other Accession	NP_004387, 1655, 13207 (mouse)
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**69148**

Goat Anti-DDX5 / p68 RNA helicase 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

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-DDX5 / p68 RNA helicase Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-DDX5 / p68 RNA helicase 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.

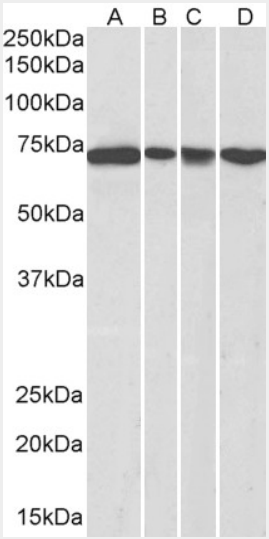
Cellular Location
Nucleus. Nucleus, nucleolus Nucleus speckle. Cytoplasm. Note=During the G0 phase, predominantly located in the nucleus. Cytoplasmic levels increase during the G1/S phase. During the M phase, located at the vicinity of the condensed chromosomes. At G1, localizes in the cytoplasm

Goat Anti-DDX5 / p68 RNA helicase Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-DDX5 / p68 RNA helicase Antibody - Images



AF1311a (0.3 µg/ml) staining of NIH3T3 (A), HeLa (B), A431 (C) and Jurkat (D) nuclear lysates (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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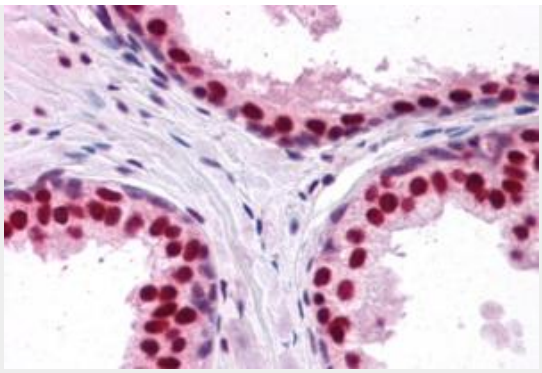

AF1311a (2.5 µg/ml) staining of paraffin embedded Human Prostate. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. Data obtained using a previous batch.

Goat Anti-DDX5 / p68 RNA helicase Antibody - Background

DEAD box proteins, characterized by the conserved motif Asp-Glu-Ala-Asp (DEAD), are putative RNA helicases. They are implicated in a number of cellular processes involving alteration of RNA secondary structure, such as translation initiation, nuclear and mitochondrial splicing, and ribosome and spliceosome assembly. Based on their distribution patterns, some members of this family are believed to be involved in embryogenesis, spermatogenesis, and cellular growth and division. This gene encodes a DEAD box protein, which is a RNA-dependent ATPase, and also a proliferation-associated nuclear antigen, specifically reacting with the simian virus 40 tumor antigen. This gene consists of 13 exons, and alternatively spliced transcripts containing several intron sequences have been detected, but no isoforms encoded by these transcripts have been identified.

Goat Anti-DDX5 / p68 RNA helicase Antibody - References

Expression, purification and preliminary crystallographic analysis of recombinant human DEAD-box polypeptide 5. Choi YW, et al. Acta Crystallogr Sect F Struct Biol Cryst Commun, 2010 Feb 1. PMID 20124720.
Aire's partners in the molecular control of immunological tolerance. Abramson J, et al. Cell, 2010 Jan 8. PMID 20085707.
A DDX5 S480A polymorphism is associated with increased transcription of fibrogenic genes in hepatic stellate cells. Guo J, et al. J Biol Chem, 2010 Feb 19. PMID 20022962.
The DEAD-box protein p72 regulates ERalpha-/oestrogen-dependent transcription and cell growth, and is associated with improved survival in ERalpha-positive breast cancer. Wortham NC, et al. Oncogene, 2009 Nov 19. PMID 19718048.
Interaction between SARS-CoV helicase and a multifunctional cellular protein (Ddx5) revealed by yeast and mammalian cell two-hybrid systems. Chen JY, et al. Arch Virol, 2009. PMID 19224332.