



DDX17 Mouse mAb

Catalog No	YP-mAb-19015
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	DDX17
Immunogen	The antiserum was produced against a synthesized peptide derived from human protein. AA range: 105-145
Specificity	This antibody detects endogenous levels of DDX17 at Human, Mouse
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal,Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	P72;RH70;DDX17;Probable ATP-dependent RNA helicase DDX17 (DEAD box protein 17) (DEAD box protein p72) (RNA-dependent helicase p72)
Observed Band	72kDa/82kDa
Calculated Molecular Weight	80kDa
Cell Pathway	Nucleus . Nucleus, nucleolus . Cytoplasm, cytosol . In the course of bunyavirus infection, relocalizes from the nucleus to the cytosol where it binds viral RNA to antagonize replication. .
Tissue Specificity	Widely expressed (PubMed:8871553). Low expression, if any, in normal colonic epithelial cells (at protein level). Levels tend to increase during colon cancer progression, from very low in benign hyperplastic polyps to very high in tubular and villous adenomas (PubMed:17699760).
Function	As an RNA helicase, unwinds RNA and alters RNA structures through ATP binding and hydrolysis. Involved in multiple cellular processes, including pre-mRNA splicing, alternative splicing, ribosomal RNA processing and miRNA processing, as well as transcription regulation. Regulates the alternative splicing of exons exhibiting specific features . For instance, promotes the inclusion of AC-rich alternative exons in CD44 transcripts . This function requires the RNA helicase activity . Affects NFAT5 and histone macro-H2A.1/MACROH2A1



alternative splicing in a CDK9-dependent manner . In NFAT5, promotes the introduction of alternative exon 4, which contains 2 stop codons and may target NFAT5 exon 4-containing transcripts to nonsense-mediated mRNA decay, leading to the down-regulation of NFAT5 protein . Affects splicing of mediators of steroid hormone signaling pathway, including kinases that phosphorylates ESR1, such as CDK2, MAPK1 and GSK3B, and transcriptional regulators, such as CREBBP, MED1, NCOR1 and NCOR2. By affecting GSK3B splicing, participates in ESR1 and AR stabilization . In myoblasts and epithelial cells, cooperates with HNRNPH1 to control the splicing of specific subsets of exons . In addition to binding mature mRNAs, also interacts with certain pri-microRNAs, including MIR663/miR-663a, MIR99B/miR-99b, and MIR6087/miR-6087 . Binds pri-microRNAs on the 3' segment flanking the stem loop via the 5'-[ACG] CAUC[ACU]-3' consensus sequence . Required for the production of subsets of microRNAs, including MIR21 and MIR125B1 . May be involved not only in microRNA primary transcript processing, but also stabilization (By similarity). Participates in MYC down-regulation at high cell density through the production of MYC-targeting microRNAs . Along with DDX5, may be involved in the processing of the 32S intermediate into the mature 28S ribosomal RNA . Promoter-specific transcription regulator, functioning as a coactivator or corepressor depending on the context of the promoter and the transcriptional complex in which it exists . Enhances NFAT5 transcriptional activity . Synergizes with TP53 in the activation of the MDM2 promoter; this activity requires acetylation on lysine residues . May also coactivate MDM2 transcription through a TP53-independent pathway . Coactivates MMP7 transcription . Along with CTNNB1, coactivates MYC, JUN, FOSL1 and cyclin D1/CCND1 transcription . Alone or in combination with DDX5 and/or SRA1 non-coding RNA, plays a critical role in promoting the assembly of proteins required for the formation of the transcription initiation complex and chromatin remodeling leading to coactivation of MYOD1-dependent transcription. This helicase-independent activity is required for skeletal muscle cells to properly differentiate into myotubes . During epithelial-to-mesenchymal transition, coregulates SMAD-dependent transcriptional activity, directly controlling key effectors of differentiation, including miRNAs which in turn directly repress its expression . Plays a role in estrogen and testosterone signaling pathway at several levels. Mediates the use of alternative promoters in estrogen-responsive genes and regulates transcription and splicing of a large number of steroid hormone target genes . Contrary to splicing regulation activity, transcriptional coregulation of the estrogen receptor ESR1 is helicase-independent . Plays a role in innate immunity. Specifically restricts bunyavirus infection, including Rift Valley fever virus (RVFV) or La Crosse virus (LACV), but not vesicular stomatitis virus (VSV), in an interferon- and DROSHA-independent manner . Binds to RVFV RNA, likely via structured viral RNA elements . Promotes mRNA degradation mediated by the antiviral zinc-finger protein ZC3HAV1, in an ATPase-dependent manner .

Background

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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