



DDX3 Monoclonal Antibody

Catalog No	YP-mAb-01642
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB
Gene Name	DDX3X/DDX3Y
Protein Name	ATP-dependent RNA helicase DDX3X/Y
Immunogen	The antiserum was produced against synthesized peptide derived from N-terminal human DDX3. AA range:14-63
Specificity	DDX3 Monoclonal Antibody detects endogenous levels of DDX3 protein.
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 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	DDX3X; DBX; DDX3; ATP-dependent RNA helicase DDX3X; DEAD box protein 3; X-chromosomal; DEAD box, X isoform; Helicase-like protein 2; HLP2; DDX3Y; DBY; ATP-dependent RNA helicase DDX3Y; DEAD box protein 3, Y-chromosomal
Observed Band	73kD
Cell Pathway	Cell membrane . Nucleus . Cytoplasm . Cytoplasm, Stress granule . Inflammasome . Cell projection, lamellipodium . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Shuttles between the nucleus and the cytosol (PubMed:15507209, PubMed:18636090, PubMed:29899501, PubMed:31575075, PubMed:30131165). Exported from the nucleus partly through the XPO1/CRM1 system and partly through NXF1/TAP (PubMed:15507209, PubMed:18636090, PubMed:18596238, PubMed:31575075, PubMed:30131165). Localizes to nuclear pores on the outer side of the nuclear membrane (PubMed:15507209). In the cytosol, partly colocalizes with mitochondria (PubMed:20127681). At G0, predominantly located in nucleus. In G1/S phase, predominantly cytoplasmic (PubMed:22034099). During prophase/prometaphase, localizes in cios
Tissue Specificity	Widely expressed (PubMed:15294876). In testis, expressed in spermatids (PubMed:15294876). Expressed in epidermis and liver (at protein level) (PubMed:16818630, PubMed:16301996).



Function

function:ATP-dependent RNA helicase. Acts as a cofactor for XPO1-mediated nuclear export of incompletely spliced HIV-1 Rev RNAs. Also involved in HIV-1 replication. Interacts specifically with hepatitis C virus core protein resulting in a change in intracellular location.,similarity:Belongs to the DEAD box helicase family.,similarity:Belongs to the DEAD box helicase family. DDX3/DED1 subfamily.,similarity:Contains 1 helicase ATP-binding domain.,similarity:Contains 1 helicase C-terminal domain.,subcellular location:Located predominantly in nuclear speckles and, at low levels, throughout the cytoplasm. Located to the outer side of nuclear pore complexes (NPC). Shuttles between the nucleus and the cytoplasm in a XPO1-dependent manner.,subunit:Found in a complex with Rev and XPO1. Interacts with XPO1 and TDRD3. Interacts with HCV core protein.,

Background

The protein encoded by this gene is a member of the large DEAD-box protein family, that is defined by the presence of the conserved Asp-Glu-Ala-Asp (DEAD) motif, and has ATP-dependent RNA helicase activity. This protein has been reported to display a high level of RNA-independent ATPase activity, and unlike most DEAD-box helicases, the ATPase activity is thought to be stimulated by both RNA and DNA. This protein has multiple conserved domains and is thought to play roles in both the nucleus and cytoplasm. Nuclear roles include transcriptional regulation, mRNP assembly, pre-mRNA splicing, and mRNA export. In the cytoplasm, this protein is thought to be involved in translation, cellular signaling, and viral replication. Misregulation of this gene has been implicated in tumorigenesis. This gene has a paralog located in the nonrecombining region of the Y chromosome. Pseudogenes sharing similarit

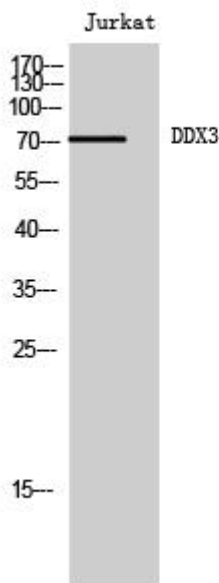
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

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

Products Images



Western Blot analysis of various cells using DDX3 Monoclonal Antibody