



## Rabbit Anti-DDX1 antibody

SL14214R

<b>Product Name:</b>	DDX1
<b>Chinese Name:</b>	ATP依赖解旋酶DDX1抗体
<b>Alias:</b>	ATP dependent helicase DDX1; ATP-dependent helicase DDX1; ATP-dependent RNA helicase DDX1; DBP RB; DBP-RB; DDX1; DDX1_HUMAN; DEAD (Asp Glu Ala Asp) box polypeptide 1; DEAD box 1; DEAD box polypeptide 1; DEAD box protein 1; DEAD box protein retinoblastoma; DEAD-box protein 1; DEAD-box protein-retinoblastoma; DEAD/H (Asp Glu Ala Asp/His) box polypeptide 1.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Zebrafish,Sheep,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	82kDa
<b>Cellular localization:</b>	The nucleuscytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human DDX1:21-120/740
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	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 of unknown function. It shows high transcription levels in 2 retinoblastoma cell lines and in tissues of neuroectodermal origin. [provided by RefSeq, Jul 2008]

**Function:**

Acts as an ATP-dependent RNA helicase, able to unwind both RNA-RNA and RNA-DNA duplexes. Possesses 5' single-stranded RNA overhang nuclease activity. Possesses ATPase activity on various RNA, but not DNA polynucleotides. May play a role in RNA clearance at DNA double-strand breaks (DSBs), thereby facilitating the template-guided repair of transcriptionally active regions of the genome. Together with RELA, acts as a coactivator to enhance NF-kappa-B-mediated transcriptional activation. Acts as a positive transcriptional regulator of cyclin CCND2 expression. Binds to the cyclin CCND2 promoter region. Associates with chromatin at the NF-kappa-B promoter region via association with RELA. Binds to poly(A) RNA. May be involved in 3'-end cleavage and polyadenylation of pre-mRNAs. Required for HIV-1 Rev function as well as for HIV-1 replication. Binds to the RRE sequence of HIV-1 mRNAs.

**Subcellular Location:**

Nucleus. Cytoplasm. Cytoplasmic granule. Localized with MBNL1, TIAL1 and YBX1 in stress granules upon stress. Localized with CSTF2 in cleavage bodies. Forms large aggregates called DDX1 bodies. Relocalized into multiple foci (IR-induced foci or IRIF) after IR treatment, a process that depends on the presence of chromosomal DNA and/or RNA-DNA duplexes. Relocalized at sites of DNA double-strand breaks (DSBs) in an ATM-dependent manner after IR treatment. Colocalized with RELA in the nucleus upon TNF-alpha induction. Relocalized to the cytoplasm with a perinuclear staining pattern in avian infectious bronchitis virus (IBV)-infected cells. Required for proper localization of HIV-1 Rev.

**Tissue Specificity:**

Highest levels of transcription in 2 retinoblastoma cell lines and in tissues of neuroectodermal origin including the retina, brain, and spinal cord.

**Post-translational modifications:**

Phosphorylated. Phosphorylated by ATM kinase; phosphorylation is increased in response to ionizing radiation (IR).

**Similarity:**

Belongs to the DEAD box helicase family. DDX1 subfamily. Contains 1 B30.2/SPRY domain.

Contains 1 helicase ATP-binding domain.

Contains 1 helicase C-terminal domain.

**SWISS:**

Q92499

**Gene ID:**  
1653

**Database links:**

[Entrez Gene: 1653](#) Human

[Entrez Gene: 104721](#) Mouse

[Entrez Gene: 84474](#) Rat

[Omim: 601257](#) Human

[SwissProt: Q92499](#) Human

[SwissProt: Q91VR5](#) Mouse

[SwissProt: Q641Y8](#) Rat

[Unigene: 440599](#) Human

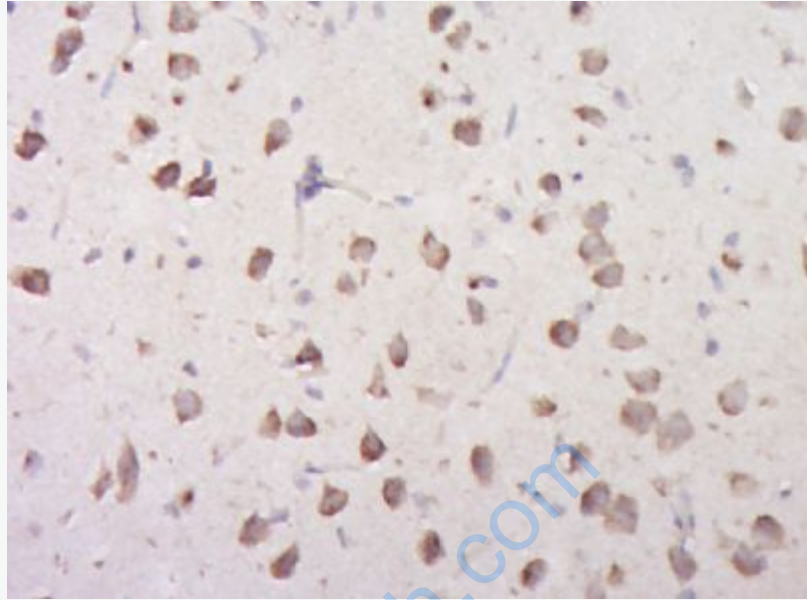
[Unigene: 251255](#) Mouse

[Unigene: 65536](#) Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Picture:**



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (DDX1) Polyclonal Antibody, Unconjugated (SL14214R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.