

DDX50 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55473

Specification

DDX50 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype Purity affinity purified by Protein A	IHC-P, IHC-F, IF, ICC, E <u>O9BO39</u> Rat, Dog, Bovine Rabbit Polyclonal 83 KDa Liquid KLH conjugated synthetic peptide derived from human DDX50 101-200/737 IgG
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus, nucleolus.
SIMILARITY	Belongs to the DEAD box helicase family.
	DDX21/DDX50 subfamily. Contains 1 helicase ATP-binding domain. Contains 1 helicase C-terminal domain.
Important Note	This product as supplied is intended for research use only, not for use in human,
	therapeutic or diagnostic applications.

Background Descriptions

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 DEAD box protein family are believed to be involved in embryogenesis, spermatogenesis, and cellular growth and division. This gene encodes a DEAD box enzyme that may be involved in ribosomal RNA synthesis or processing. This gene and DDX21, also called RH-II/GuA, have similar genomic structures and are in tandem orientation on chromosome 10, suggesting that the two genes arose by gene duplication in evolution. This gene has pseudogenes on chromosomes 2, 3 and 4. Alternative splicing of this gene generates multiple transcript variants, but the full length nature of all the other variants but one has not been defined. [provided by RefSeq, Jul 2008]

DDX50 Polyclonal Antibody - Additional Information

Gene ID 79009

Other Names ATP-dependent RNA helicase DDX50, 3.6.4.13, DEAD box protein 50, Gu-beta, Nucleolar protein



Gu2, DDX50

Dilution

IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

DDX50 Polyclonal Antibody - Protein Information

Name DDX50

Function

ATP-dependent RNA helicase that may play a role in various aspects of RNA metabolism including pre-mRNA splicing or ribosomal RNA production (PubMed:12027455). Also acts as a viral restriction factor and promotes the activation of the NF-kappa-B and IRF3 signaling pathways following its stimulation with viral RNA or infection with RNA and DNA viruses (PubMed:35215908). For instance, decreases vaccinia virus, herpes simplex virus, Zika virus or dengue virus replication during the early stage of infection (PubMed:28181036, PubMed:35215908). Mechanistically, acts via the adapter TICAM1 and independently of the DDX1-DDX21-DHX36 helicase complex to induce the production of interferon-beta (PubMed:35215908).

Cellular Location

Nucleus, nucleolus. Cytoplasm Note=Accumulates in the cytoplasm to activate signaling upstream of IRF3 during viral infection.

Tissue Location Highest expression in skeletal muscle, liver, heart, placenta, and kidney.

DDX50 Polyclonal Antibody - Protocols

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

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

DDX50 Polyclonal Antibody - Images

