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# DDX18 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55466

## Product Information

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| **Application** | IHC-P, IHC-F, IF, ICC, E |
| **Primary Accession** | Q9NVP1 |
| **Reactivity** | Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 75407 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human DDX18 |
| **Epitope Specificity** | 581-670/670 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Belongs to the DEAD box helicase family. DDX18/HAS1 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 family are believed to be involved in embryogenesis, spermatogenesis, and cellular growth and division. This gene encodes a DEAD box protein, and it is activated by Myc protein. [provided by RefSeq, Jul 2008] |

## Additional Information

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| **Gene ID** | 8886 |
| **Other Names** | ATP-dependent RNA helicase DDX18, 3.6.4.13, DEAD box protein 18, Myc-regulated DEAD box protein, MrDb, DDX18, cPERP-D {ECO:0000303\|PubMed:20813266} |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000 |
| **Format** | 0.01M TBS(pH7.4) with 1% BSA, 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. |

## Protein Information

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| **Name** | DDX18 |
| **Synonyms** | cPERP-D {ECO:0000303\|PubMed:20813266} |
| **Function** | ATP-dependent RNA helicase that plays a role in the regulation of R-loop homeostasis in both endogenous R-loop-prone regions and at sites of DNA damage. At endogenous loci such as actively transcribed genes, may act as a helicase to resolve the formation of R- loop during transcription and prevent the interference of R-loop with DNA-replication machinery. Also participates in the removal of DNA- lesion-associated R-loop (PubMed:35858569). Plays an essential role for establishing pluripotency during embryogenesis and for pluripotency maintenance in embryonic stem cells. Mechanistically, prevents the polycomb repressive complex 2 (PRC2) from accessing rDNA loci and protects the active chromatin status in nucleolus (By similarity). |
| **Cellular Location** | Nucleus, nucleolus. Chromosome |