

DDX4 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17285a

Specification

DDX4 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	O9NQI0
Other Accession	O4R5S7 , NP_001160005.1 , NP_001136021.1
Reactivity	Human, Mouse
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	79308
Antigen Region	103-131

DDX4 Antibody (N-term) - Additional Information

Gene ID 54514

Other Names

Probable ATP-dependent RNA helicase DDX4, DEAD box protein 4, Vasa homolog, DDX4, VASA

Target/Specificity

This DDX4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 103-131 amino acids from the N-terminal region of human DDX4.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

DDX4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

DDX4 Antibody (N-term) - Protein Information

Name DDX4

Synonyms VASA

Function ATP-dependent RNA helicase required during spermatogenesis (PubMed:[10920202](#), PubMed:[21034600](#)). Required to repress transposable elements and preventing their mobilization, which is essential for the germline integrity (By similarity). Acts via the piRNA metabolic process, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and governs the methylation and subsequent repression of transposons (By similarity). Involved in the secondary piRNAs metabolic process, the production of piRNAs in fetal male germ cells through a ping-pong amplification cycle (By similarity). Required for PIWIL2 slicing- triggered piRNA biogenesis: helicase activity enables utilization of one of the slice cleavage fragments generated by PIWIL2 and processing these pre-piRNAs into piRNAs (By similarity).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q61496}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q61496} Note=Component of the meiotic nuage, also named P granule, a germ-cell- specific organelle required to repress transposon activity during meiosis. {ECO:0000250|UniProtKB:Q61496}

Tissue Location

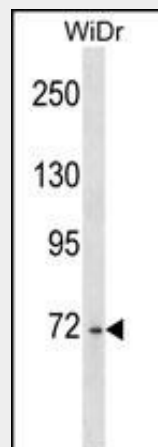
Expressed only in ovary and testis. Expressed in migratory primordial germ cells in the region of the gonadal ridge in both sexes.

DDX4 Antibody (N-term) - Protocols

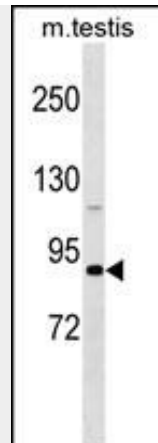
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

DDX4 Antibody (N-term) - Images



DDX4 Antibody (N-term) (Cat. #AP17285a) western blot analysis in WiDr cell line lysates (35ug/lane). This demonstrates the DDX4 antibody detected the DDX4 protein (arrow).



DDX4 Antibody (N-term) (Cat. #AP17285a) western blot analysis in mouse testis tissue lysates (35ug/lane). This demonstrates the DDX4 antibody detected the DDX4 protein (arrow).

DDX4 Antibody (N-term) - Background

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, which is a homolog of VASA proteins in *Drosophila* and several other species. The gene is specifically expressed in the germ cell lineage in both sexes and functions in germ cell development. Multiple transcript variants encoding different isoforms have been found for this gene.

DDX4 Antibody (N-term) - References

Tilgner, K., et al. *Stem Cells* 28(1):84-92(2010)
Sugimoto, K., et al. *J. Hum. Genet.* 54(8):450-456(2009)
Hashimoto, H., et al. *Gynecol. Oncol.* 111(2):312-319(2008)
Albamonte, M.S., et al. *Hum. Reprod.* 23(8):1895-1901(2008)
Guo, X., et al. *Asian J. Androl.* 9(3):339-344(2007)