

DDX4 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP17285a**Specification**

DDX4 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q9NQI0](#)**DDX4 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 54514**Other Names**

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

DDX4 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

DDX4 Antibody (N-term) Blocking Peptide - Images**DDX4 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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)