

**DDX4 Monoclonal Antibody**

<b>Catalog No :</b>	YM0196
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;IHC;IF;FCM;ELISA
<b>Target :</b>	DDX4
<b>Gene Name :</b>	DDX4
<b>Protein Name :</b>	Probable ATP-dependent RNA helicase DDX4
<b>Human Gene Id :</b>	54514
<b>Human Swiss Prot No :</b>	Q9NQH0
<b>Mouse Swiss Prot No :</b>	Q61496
<b>Immunogen :</b>	Purified recombinant fragment of human DDX4 expressed in E. Coli
<b>Specificity :</b>	DDX4 Monoclonal Antibody detects endogenous levels of DDX4 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. Flow cytometry: 1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	79kD
<b>P References :</b>	1. Proc Natl Acad Sci USA.2000 97(17):9585-90. 2. Lab Invest.2002 82(2):159-66. 3. Mol Reprod Dev.2004 67(1):1-7.

4. Nat Genet.2004 36(1):40-5.

### 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. [provided by RefSeq, Oct 2009],

### Function :

function:May play a role in germ cell development.,similarity:Belongs to the DEAD box helicase family.,similarity:Belongs to the DEAD box helicase family. DDX4/VASA subfamily.,similarity:Contains 1 helicase ATP-binding domain.,similarity:Contains 1 helicase C-terminal domain.,subunit:N-terminus interacts with RANBP9. Interacts with PIWIL2 and MAEL.,tissue specificity:Expressed only in ovary and testis. Expressed in migratory primordial germ cells in the region of the gonadal ridge in both sexes.,

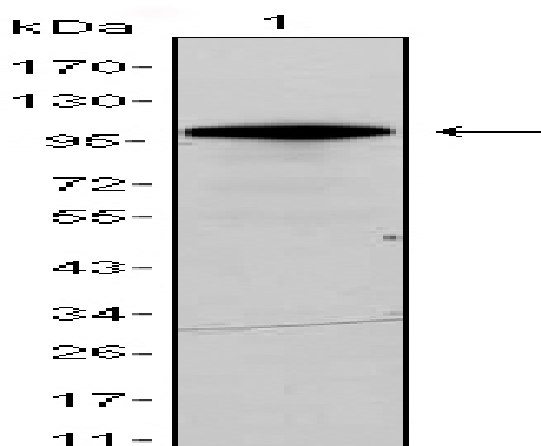
### Subcellular Location :

Cytoplasm . Cytoplasm, perinuclear region . Component of the meiotic nuage, also named P granule, a germ-cell-specific organelle required to repress transposon activity during meiosis. .

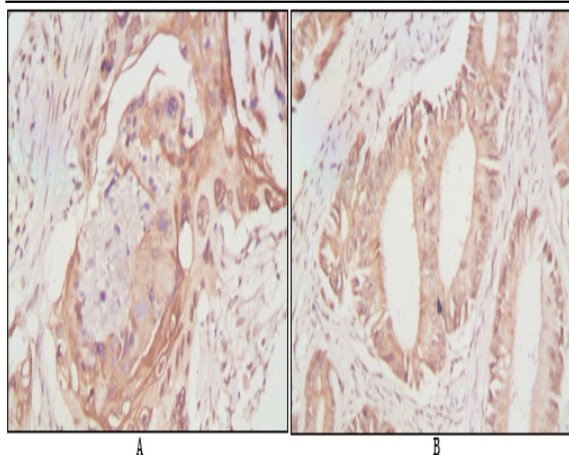
### Expression :

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

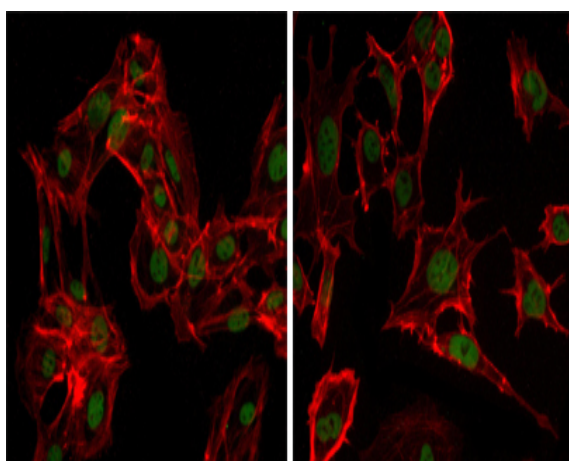
## Products Images



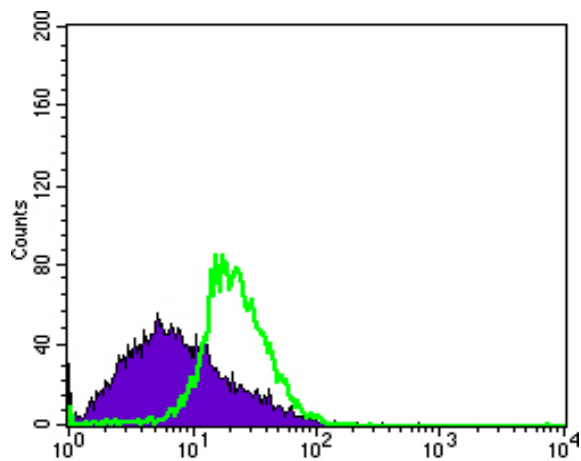
Western Blot analysis using DDX4 Monoclonal Antibody against DDX4-hlgFc transfected HEK293 cell lysate.



Immunohistochemistry analysis of paraffin-embedded human lung cancer (A) and rectal cancer (B), showing cytoplasmic localization with DAB staining using DDX4 Monoclonal Antibody.



Immunofluorescence analysis of MSCs(left) and NTERA-2 (right) cells using DDX4 Monoclonal Antibody (green). Red: Actin filaments have been labeled with DY-554 phalloidin.



Flow cytometric analysis of MSCS cells using DDX4 Monoclonal Antibody (green) and negative control (purple).