

PIWL4 rabbit pAb

Catalog No :	YT7681
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC
Target :	PIWL4
Gene Name :	PIWIL4 HIWI2 PIWI
Protein Name :	PIWL4
Human Gene Id :	143689
Human Swiss Prot No :	Q7Z3Z4
Mouse Gene Id :	330890
Mouse Swiss Prot No :	Q8CGT6
Rat Swiss Prot No :	Q4G033
Immunogen :	Synthesized peptide derived from human PIWL4 AA range: 108-158
Specificity :	This antibody detects endogenous levels of PIWL4 at Human/Mouse/Rat
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000;IHC 1:50-300
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 94kD

Background : PIWIL4 belongs to the Argonaute family of proteins, which function in development and maintenance of germline stem cells (Sasaki et al., 2003 [PubMed 12906857]).[supplied by OMIM, Mar 2008],

Function : function:Plays a central role during spermatogenesis by repressing transposable elements and prevent their mobilization, which is essential for the germline integrity. 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 govern the methylation and subsequent repression of transposons. Directly binds piRNAs, a class of 24 to 30 nucleotide RNAs that are generated by a Dicer-independent mechanism and are primarily derived from transposons and other repeated sequence elements. Associates with secondary piRNAs antisense and PIWIL2/MILI is required for such association. The piRNA process acts upstream of known mediators of DNA methylation. Participates to a piRNA amplification loop. Besides their function in transposable elements repression, piRNAs are probably involved in other

Subcellular Location : Nucleus . Cytoplasm . Probable component of the meiotic nuage, also named P granule, a germ-cell-specific organelle required to repress transposon activity during meiosis. PIWIL2/MILI is required for nuclear localization (By similarity). .

Expression : Ubiquitously expressed (PubMed:25038252, PubMed:17544373, PubMed:28025795, PubMed:28711973, PubMed:22483988). Detected in retina, retinal pigment epithelia cells (RPE) (at protein level) (PubMed:28025795).

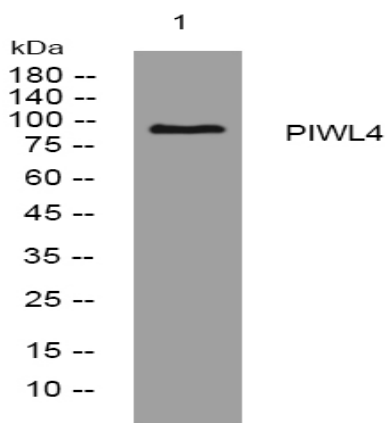
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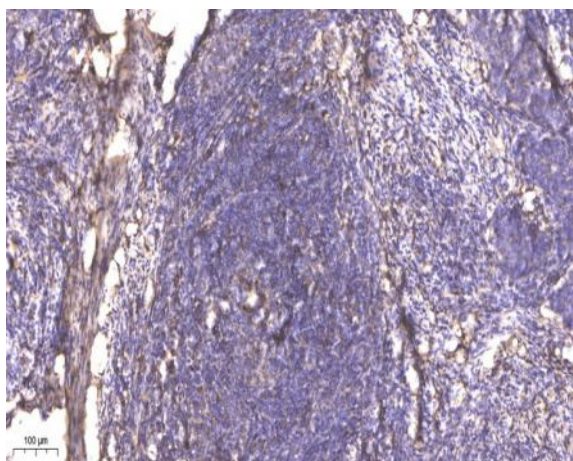
Host : Rabbit

Modifications : Unmodified

Products Images



Western blot analysis of lysates from 293T cells, primary antibody was diluted at 1:1000, 4° over night



Immunohistochemical analysis of paraffin-embedded human cervical carcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).