

PIWL4 rabbit pAb

Catalog No: YT7681

Reactivity: Human; Mouse; Rat

Applications: WB;IHC

Target: PIWL4

Gene Name: PIWIL4 HIWI2 PIWI

Q7Z3Z4

Q8CGT6

Protein Name: PIWL4

Human Gene Id: 143689

Human Swiss Prot

No:

Mouse Gene ld: 330890

Mouse Swiss Prot

No:

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

1/3



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

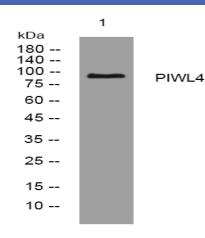
repression, piRNAs are probably involved in other

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).

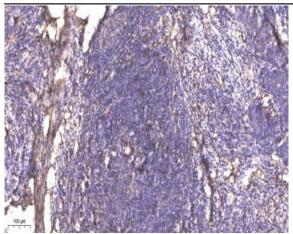
Expression:

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).

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).