

Rabbit Anti-PIWIL1 antibody

SL0665R

Product Name:	PIWIL1
Chinese Name:	piwi样1蛋白抗体
Alias:	HIWI; MIWI; P-element induced wimpy testis; Piwi; Piwi homolog; Piwi like 1; Piwi like protein 1; PIWIL 1; PIWIL1; HIWI; MIWI; Piwi (Drosophila) like 1; PIWI; Piwi homolog; Piwi like 1 (drosophila); Piwi like 1; Piwi-like protein 1; PIWIL 1; PIWIL1; PIWL1; piwi-like protein 1 isoform 1; PIWL1_HUMAN.
	Specific References(1) SL0665R has been referenced in 1 publications.
文献引用 Publ <mark>M</mark> ed :	[IF=2.03]Liu, Wen-Kang, Xiang-Yang Jiang, and Zhen-Xi Zhang. "Expression of
	PSCA, PIWIL1 and TBX2 and its correlation with HPV16 infection in formalin-fixed,
	paraffin-embedded cervical squamous cell carcinoma specimens." Archives of virology
	155.5 (2010): 657-663.IHC-P;Human.
	PubMed:20229117
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	95kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PIWIL1:551-650/861
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

Storage:

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:

PubMed

This gene encodes a member of the PIWI subfamily of Argonaute proteins, evolutionarily conserved proteins containing both PAZ and Piwi motifs that play important roles in stem cell self-renewal, RNA silencing, and translational regulation in diverse organisms. The encoded protein may play a role as an intrinsic regulator of the self-renewal capacity of germline and hematopoietic stem cells. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2010].

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 methylated piRNAs, a class of 24 to 30 nucleotide RNAs that are generated by a Dicerindependent mechanism and are primarily derived from transposons and other repeated sequence elements. Besides their function in transposable elements repression, piRNAs are probably involved in other processes during meiosis such as translation regulation. Probable component of some RISC complex, which mediates RNA cleavage and translational silencing. Also plays a role in the formation of chromatoid bodies and is required for some miRNAs stability. Isoform 3 may be a negative developmental regulator.

Subunit:

Interacts (via Piwi domain) with DICER1, suggesting that it forms ribonucleoprotein RISC complexes. This interaction is regulated by HSP90AB1 activity. Interacts with MAEL, KIF17, PABPC1, PRMT5 and WDR77. Interacts (when methylated on arginine residues) with TDRD1, TDRKH/TDRD2, RNF17/TDRD4, TDRD6, TDRD7 and TDRD9

Subcellular Location:

Cytoplasm. Note=Component of the meiotic nuage, also named P granule, a germ-cellspecific organelle required to repress transposon during meiosis. Also present in chromatoid body.

Tissue Specificity:

Detected in most fetal and adult tissues. Expressed in testes, specifically in germline cells; detected in spermatocytes and spermatids during spermatogenesis. Increased expression in testicular tumors originating from embryonic germ cells with retention of germ cells phenotype. No expression in testicular tumors of somatic origin, such as Sertoli cell and Leydig cell tumors. Overexpressed in gastric cancer cells. Isoform 3 is

Product Detail:

ubiquitously expressed, and specifically in CD34+ hematopoietic progenitor cells but not in more differentiated cells.

Post-translational modifications:

Arginine methylation by PRMT5 is required for the interaction with Tudor domain-containing protein (TDRD1, TDRKH/TDRD2, RNF17/TDRD4, TDRD6, TDRD7 and TDRD9) and subsequent localization to the meiotic nuage, also named P granule.

Similarity:

Belongs to the argonaute family. Piwi subfamily.

Contains 1 PAZ domain. Contains 1 Piwi domain.

SWISS: A6N7Y9

Gene ID: 9271

Database links:

Entrez Gene: 9271 Human

Entrez Gene: 57749 Mouse

Entrez Gene: 363912 Rat

Omim: 605571 Human

SwissProt: Q96J94 Human

SwissProt: Q9JMB7 Mouse

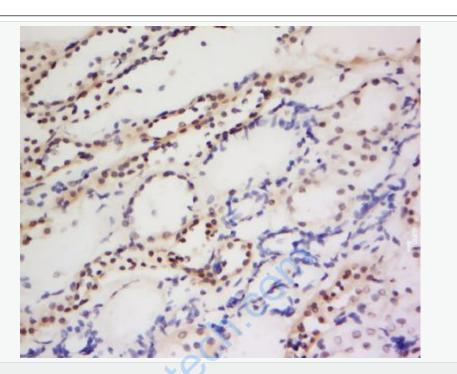
Unigene: 405659 Human

Unigene: 272720 Mouse

Unigene: 131387 Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Tissue/cell: human kidney tissue; 4% Paraformaldehyde-fixed and paraffinembedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-PIWIL1 Polyclonal Antibody, Unconjugated(SL0665R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining