

Rabbit anti-Human PIWIL4/PIWI Polyclonal Antibody | anti-PIWIL4 antibody

Anti-PIWIL4/PIWI Antibody Picoband

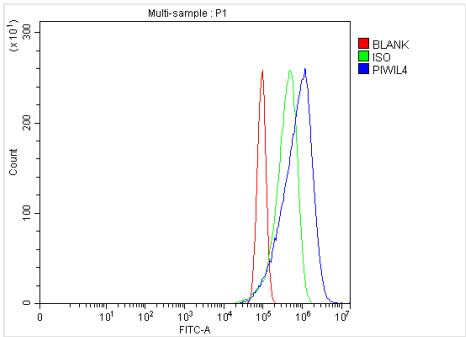
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126469	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

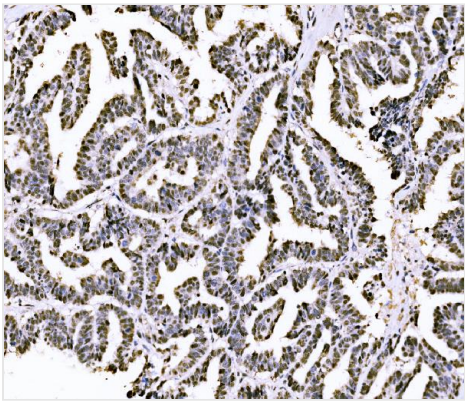
PIWIL4/PIWI; Polyclonal Antibody; Anti-PIWIL4/PIWI Antibody Picoband; anti-PIWIL4 antibody

PRODUCT SPECIFICATIONS

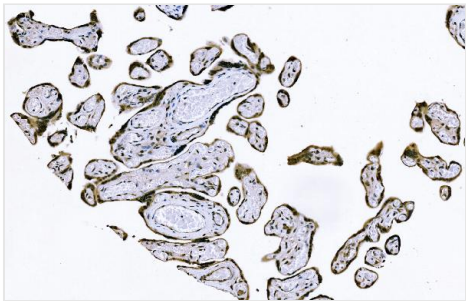
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-PIWIL4 antibody	ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E Coli-derived human PIWIL4/PIWI recombinant protein (Position: R51-N749).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.



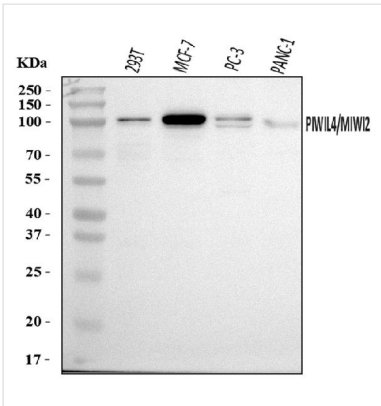
FCM/FACS (Flow Cytometry)
Figure 4. Flow Cytometry analysis of PC-3 cells using anti-PIWIL4/PIWI antibody (AAA126469). Overlay histogram showing PC-3 cells stained with AAA126469 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PIWIL4/PIWI Antibody (AAA126469, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)
Figure 3. IHC analysis of PIWIL4/PIWI using anti-PIWIL4/PIWI antibody (AAA126469). PIWIL4/PIWI was detected in a paraffin-embedded section of human ovarian serous adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PIWIL4/PIWI Antibody (AAA126469) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)
Figure 2. IHC analysis of PIWIL4/PIWI using anti-PIWIL4/PIWI antibody (AAA126469). PIWIL4/PIWI was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PIWIL4/PIWI Antibody (AAA126469) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)
Figure 1. Western blot analysis of PIWIL4/PIWI using anti-PIWIL4/PIWI antibody (AAA126469). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human 293T whole cell lysates, Lane 2: human MCF-7 whole cell lysates, Lane 3: human PC-3 whole cell lysates, Lane 4: human PANC-1 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PIWIL4/PIWI antigen affinity purified polyclonal antibody (#AAA126469) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PIWIL4/PIWI at approximately 97 kDa. The expected band size for PIWIL4/PIWI is at 97 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PIWIL4 antibody	PIWI-like protein 4 (PIWIL4) is a 97 kDa member of the argonaute family of proteins and the PIWI subfamily. Human PIWIL4 is 852 amino acids (aa) in length and contains one PAZ domain (aa 268-384) and one PIWI domain (aa 546-838). There are three isoforms for human PIWIL4. Isoform 1 is the standard protein. Isoform 2 has a two aa substitution for aa 1-29 in isoform 1 and a deletion of aa 523-852. Isoform 3 has a deletion of aa 1-69 and a deletion of aa 523-852. Human PIWIL4 shares 77% aa sequence identity with mouse and rat PIWIL4. PIWIL4 plays a central role in spermatogenesis.
Product Categories/Family for anti-PIWIL4 antibody	Primary Antibodies, Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	116242716
NCBI GeneID	143689
UniProt Accession #	Q7Z3Z4; Q68CZ4; Q8N8G9; Q8N9V8; Q8NEH2; B4DEG5
Molecular Weight	852
NCBI Official Full Name	Piwi-like protein 4
NCBI Official Synonym Full Names	piwi-like RNA-mediated gene silencing 4
NCBI Official Symbol	PIWIL4
NCBI Official Synonym Symbols	HIWI2; MIWI2
NCBI Protein Information	piwi-like protein 4; piwi-like 4
UniProt Protein Name	Piwi-like protein 4
UniProt Gene Name	PIWIL4
UniProt Synonym Gene Names	HIWI2; PIWI
UniProt Entry Name	PIWL4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/piwil4-piwi-antibody-flow-cytometry-immunohistochemistry-western-blot-elisa/126469>