

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human PIWIL1/HIWI in direct ELISAs.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PIWIL1/HIWI Arg82-Thr290 Accession # Q96J94
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

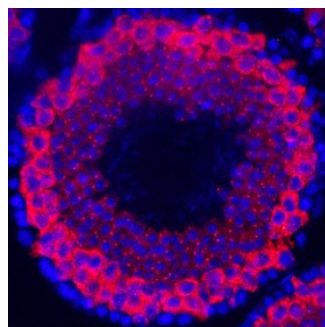
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

## DATA

### Immunohistochemistry



#### PIWIL1/HIWI in Mouse Testes.

PIWIL1/HIWI was detected in perfusion fixed frozen sections of mouse testes using Goat Anti-Human PIWIL1/HIWI Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6548) at 1.7 µg/mL overnight at 4 °C. Tissue was stained using the Northern-Lights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to the cytoplasm of spermatocytes. View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

PIWI (P-element-induced wimpy testis; also HIWI and PIWIL1) is a 92-98 kDa member of the Piwi subfamily, Argonaute family of proteins. It is expressed in germline cells, particularly spermatocytes and spermatids, and also appears in CD34+ hematopoietic stem cells plus select tumor types. PIWI binds to a series of 28-34 nucleic acid long noncoding RNAs that participate in gametogenesis. It does so under the influence of Arg methyltransferases, and in conjunction with Tudor-containing proteins. Human PIWI/PIWIL1 is 861 amino acids (aa) in length. It contains a methylation target region in the N-terminus, followed by an RNA-binding PAZ domain (aa 277-391) and an RNA-cleaving PIWI domain (aa 555-847). There are two isoform variants. One is widely expressed and shows a three aa substitution for aa 1-89. The second contains a six aa substitution for aa 824-861. Over aa 82-290, human PIWI (HIWI) shares 95% aa sequence identity with mouse PIWI (MIWI).