

## DATASHEET

# HIWI2 Mouse Monoclonal Antibody(C2904)

CAT. NO. AMA02516

### KEY FEATURES

Target	HIWI2	Source / Host	Mouse
Reactivity	Human	Clonality	Monoclonal
Applications	WB, IHC, FC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

### BACKGROUND

Plays a central role during spermatogenesis by repressing transposable elements and preventing 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 . The PIWIL4-piRNA pathway acts in the nucleus and mediates silencing of active transposons: engages with nascent transposable element transcripts and governs the piRNA-directed DNA methylation and subsequent repression of transposons . In contrast to PIWIL1 and PIWIL2, does not show endonuclease activity .

### APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:500
FC	1:100 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

### PRODUCT OVERVIEW

Description	Mouse monoclonal to HIWI2
Specificity	Recognizes endogenous levels of HIWI2 protein
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human HIWI2 expressed in E. Coli
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 97 kD; Observed: 110 kD
Form/Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	HIWI2; PIWI; Piwi-like protein 4
Gene Symbol	PIWIL4
Entrez Gene	143689(Human)
SwissProt	Q7Z3Z4(Human)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

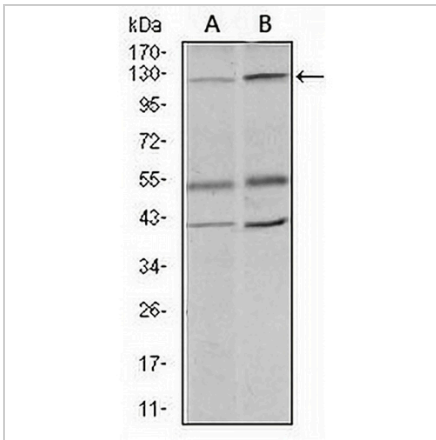
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

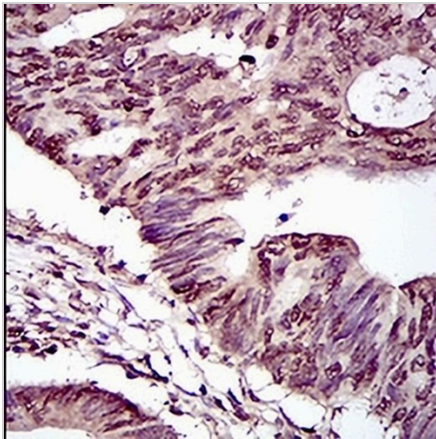
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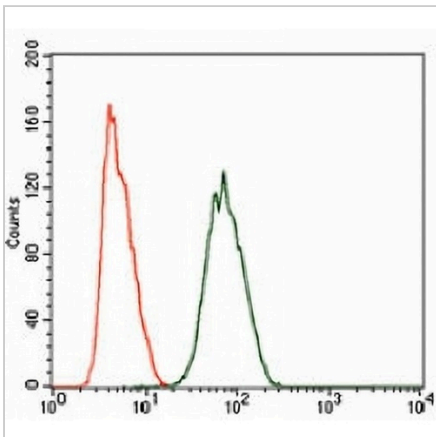
**DATA**



Western blot analysis of HIWI2 expression in PC3 (A), PANC1 (B) whole cell lysates. (Predicted band size: 97 kD; Observed band size: 110 kD)



Immunohistochemical analysis of HIWI2 staining in human rectum cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Flow cytometric analysis of HeLa cells using Anti-HIWI2 Antibody (green) and negative control (red).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.