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#2079

Miwi (G82) Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP, IF-F	Reactivity: H M	Sensitivity: Endogenous	MW (kDa): 90	Source/Isotype: Rabbit	UniProt ID: #Q96J94	Entrez-Gene Id: 9271
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Product Usage Information

Application

Western Blotting
Immunoprecipitation
Immunofluorescence (Frozen)

Dilution

1:1000
1:50
1:200 - 1:400

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Miwi (G82) Antibody detects endogenous levels of total Miwi protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence surrounding Gly82 of mouse Miwi. Antibodies are purified by protein A and peptide affinity chromatography.

Background

The *Drosophila piwi* gene was identified as being required for the self-renewal of germline stem cells (1). Piwi homologs are well conserved among various species including *Arabidopsis*, *C. elegans*, and *Homo sapiens* (1). Both Miwi and Mili proteins are mouse homologs of Piwi and contain a C-terminal Piwi domain (2). Miwi and Mili bind to Piwi-interacting RNAs (piRNAs) in male germ cells and are essential for spermatogenesis in mice (3-5).

Background References

1. Cox, D.N. et al. (1998) *Genes Dev* 12, 3715-27.
2. Kuramochi-Miyagawa, S. et al. (2001) *Mech Dev* 108, 121-33.
3. Aravin, A. et al. (2006) *Nature* 442, 203-7.
4. Grivna, S.T. et al. (2006) *Proc Natl Acad Sci USA* 103, 13415-20.
5. Grivna, S.T. et al. (2006) *Genes Dev* 20, 1709-14.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation **IF-F:** Immunofluorescence (Frozen)

Cross-Reactivity Key

H: Human **M:** Mouse

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