

**#2025** Store at -20°C

# Miwi (D478) Antibody

100 µl  
 (10 western blots)

**Orders** ■ 877-616-CELL (2355)  
 orders@cellsignal.com  
**Support** ■ 877-678-TECH (8324)  
 info@cellsignal.com  
**Web** ■ www.cellsignal.com

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W	M	90 kDa	Rabbit**
Endogenous			

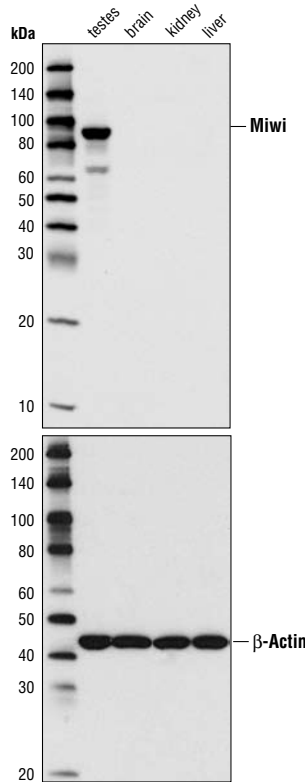
**Background:** The *Drosophila piwi* gene was identified as being required for the self-renewal of germ-line stem cells (1). Piwi homologs are well conserved among various species including *Arabidopsis*, *C. elegans* and human (1). Both Miwi and Mili proteins are mouse homologs of Piwi and contain 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 mouse (3,4,5).

**Specificity/Sensitivity:** Miwi (D478) Antibody detects endogenous levels of total Miwi protein.

**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp478 of mouse Miwi. Antibodies are purified by protein A and peptide affinity chromatography.

**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 U S A* 103, 13415–20.
- (5) Grivna, S.T. et al. (2006) *Genes Dev* 20, 1709–14.



Western blot analysis of extracts from various mouse tissues using Miwi (D478) Antibody (upper panel) or β-Actin Antibody #4967 (lower panel).

**Entrez-Gene ID** #57749  
**Swiss-Prot Acc.** #Q9JMB7

**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.

**\*Species cross-reactivity is determined by Western blot.**

**\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.**

**Recommended Antibody Dilutions:**

Western blotting 1:1000

**For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).**

**Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.**

**IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.**

**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine  
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.