

## PIWIL1 polyclonal antibody

**Other names:** HIWI, PIWI, MIWI

**Cat. No.** C15310244 (CS-PA024-100)

**Type:** Polyclonal

**Source:** Rabbit

**Lot #:** A1036-001

**Size:** 100 µl

**Concentration:** not determined

**Specificity:** Human: positive / Other species: not tested

**Purity:** Whole antiserum from rabbit containing 0.05% azide.

**Storage:** Store at -20°C; for long storage, store at -80°C.  
Avoid multiple freeze-thaw cycles.

**Precautions:** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Description:** Polyclonal antibody raised in rabbit against human PIWIL1 (piwi-like 1) using two KLH-conjugated synthetic peptides containing a sequence from the N-terminal and the central region of the protein, respectively.

### Applications

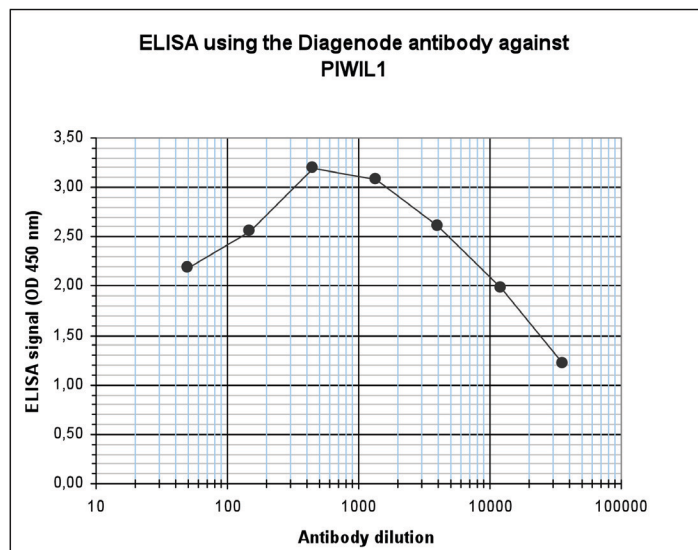
	Suggested dilution	Results
ELISA	1:1,000	Fig 1

\*The optimal dilution for other applications should be determined by the end user. For WB we suggest starting with a 1:1,000 dilution

### Target description

PIWIL1 (UniProtKB/Swiss-Prot entry Q96J94) plays a central role during spermatogenesis by repressing transposable elements and preventing their mobilization, which is essential for the germline integrity. PIWIL1 acts via the piRNA metabolic process, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and govern the methylation and subsequent repression of transposons. It directly binds methylated piRNAs, a class of 24 to 30 nucleotide RNAs that are generated by a Dicer-independent mechanism and are primarily derived from transposons and other repeated sequence elements. Besides their function in transposable elements repression, piRNAs are probably involved in other processes during meiosis such as translation regulation. PIWIL1 probably is a component of some RISC complex, which mediates RNA cleavage and translational silencing. It also plays a role in the formation of chromatoid bodies and is required for some miRNAs stability.

## Results



**Figure 1. Determination of the antibody titer**

To determine the titer of the antibody, an ELISA was performed using a serial dilution of the Diagenode antibody directed against PIWIL1 (cat. No. CS-PA024-100). The plates were coated with the peptides used for immunization of the rabbit. By plotting the absorbance against the antibody dilution (Figure 1), the titer of the antibody was estimated to be 1:23,800.

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