

PIWIL2 polyclonal antibody

Other names: HILI, PIWIL1L, MILI, CT80

Cat. No. CS-PA052-100

Type: Polyclonal

Source: Rabbit

Lot #: A1167-002

Size: 100 µl

Concentration: not determined

Specificity: Human, mouse: 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 PIWIL2 (piwi-like 2) using two KLH-conjugated synthetic peptides containing a sequence from the central region of the protein.

Applications

	Suggested dilution	Results
ELISA	1:100	Fig 1

*The optimal dilution for other applications should be determined by the end user. For WB we suggest starting with a 1:500 dilution

Target description

PIWIL2 (UniProtKB/Swiss-Prot entry Q8TC59) plays a central role during spermatogenesis by repressing transposable elements and preventing their mobilization, which is essential for the germline integrity. It plays an essential role in meiotic differentiation of spermatocytes, germ cell differentiation and in self-renewal of spermatogonial stem cells. Its presence in oocytes suggests that it may participate in similar functions during oogenesis in females. PIWIL2 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 governs the methylation and subsequent repression of transposons. It directly binds 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. PIWIL2 indirectly modulates expression of genes such as PDGFRB, SLC2A1, ITGA6, GJA7, THY1, CD9 and STRA8. Repression of PIWIL2 inhibits tumor cell growth.

Results

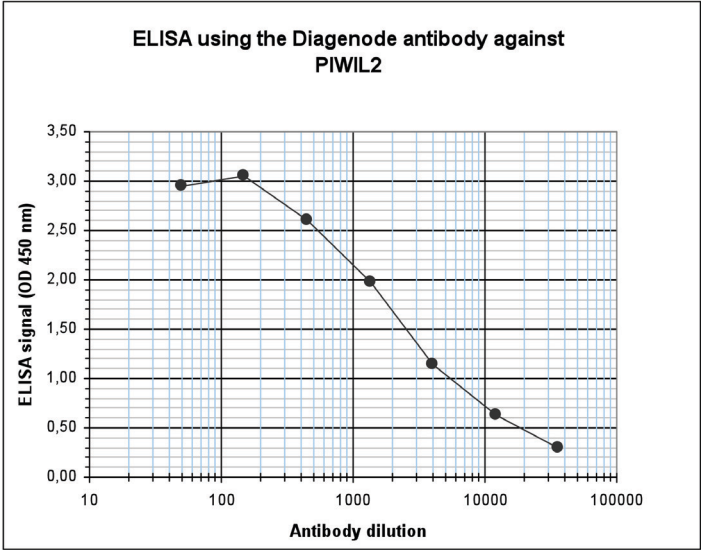


Figure 1. Determination of the antibody titer

To determine the titer of the antibody, an ELISA was performed using a serial dilution of the Diagenode antibody directed against PIWIL2 (cat. No. CS-PA052-100). 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 1:2,750.