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

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

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*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.