

# PRODUCT DATA SHEET

Bioworld Technology,Inc.

# PIWIL1 polyclonal antibody

Catalog: BS91077 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **BackGround:**

Endoribonuclease that plays a central role in postnatal germ cells by repressing transposable elements and preventing their mobilization, which is essential for the germline integrity. 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. 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. Strongly prefers a uridine in the first position of their guide (g1U preference, also named 1U-bias). Not involved in the piRNA amplification loop, also named ping-pong amplification cycle. Acts as an endoribonuclease that cleaves transposon messenger RNAs. Besides their function in transposable elements repression, piRNAs are probably involved in other processes during meiosis such as translation regulation. Probable component of some RISC complex, which mediates RNA cleavage and translational silencing. Also plays a role in the formation of chromatoid bodies and is required for some miRNAs stability. Required to sequester RNF8 in the cytoplasm until late spermatogenesis; RNF8 being released upon ubiquitination and degradation of PIWIL1.

## **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

# **Molecular Weight:**

98 kDa

#### **Swiss-Prot:**

Q96J94(Human) Q9JMB7(Mouse)

#### **Purification&Purity:**

ProA affinity purified

# **Applications:**

WB:1:500-1:1,000 IHC:1:50-1:200

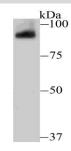
## **Storage&Stability:**

Store at +4  $^{\circ}$ C after thawing. Aliquot store at -20  $^{\circ}$ C or -80  $^{\circ}$ C. Avoid repeated freeze / thaw cycles.

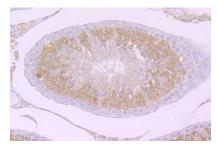
# **Specificity:**

PIWIL1 polyclonal antibody detects endogenous levels of PIWIL1 protein.

## **DATA:**



Western blot analysis of PIWIL1 on mouse testis tissue lysate using anti-PIWIL1 antibody at 1/500 dilution.



Immunohistochemical analysis of paraffin-embedded rat testis tissue using anti-PIWIL1 antibody. Counter stained with hematoxylin.

#### Note:

For research use only, not for use in diagnostic procedure.

#### Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <a href="mailto:info@biogot.com">info@biogot.com</a>
Tel: 0086-025-68037686
Fax: 0086-025-68035151