abcam

Product datasheet

Anti-PIWIL4/PIWI antibody ab21869

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概述

产**品名称** Anti-PIWIL4/PIWI**抗体**

描述 兔多克隆抗体to PIWIL4/PIWI

宿主 Rabbit

经测试应用 适用于: WB

不适用于: ICC/IF

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide corresponding to Mouse PIWIL4/PIWI aa 800 to the C-terminus (C terminal)

conjugated to keyhole limpet haemocyanin.

(Peptide available as ab23535)

阳性对照 WB - Mouse testis tissue lysate, rat testis tissue lysate and human testis tissue lysate.

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯**度** Immunogen affinity purified

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克隆 多克隆

同种型 lgG

应用

The Abpromise guarantee Abpromise 承诺保证使用ab21869于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

| 应 用 | Ab评论 | 说明 |
|------------|--------------------|---|
| WB | ★★★ ★ ★ (1) | Use a concentration of 1 µg/ml. Detects a band of approximately 98 kDa (predicted molecular weight: 98 kDa). Block with 5% BSA for 1 hour and incubate antibody in TBST for 1 hour or more. |

应用说明

Is unsuitable for ICC/IF.

靶标

功能

Plays a central role during spermatogenesis by repressing transposable elements and prevent 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 govern the methylation and subsequent repression of transposons. 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. Associates with secondary piRNAs antisense and PIWIL2/MILI is required for such association. The piRNA process acts upstream of known mediators of DNA methylation. Participates to a piRNA amplification loop. Besides their function in transposable elements repression, piRNAs are probably involved in other processes during meiosis such as translation regulation (By similarity). May be involved in the chromatin-modifying pathway by inducing 'Lys-9' methylation of histone H3 at some loci.

组织**特异性**

Expressed in testis. According to PubMed:17544373, it is ubiquitously expressed.

序列相似性

Belongs to the argonaute family. Piwi subfamily.

Contains 1 PAZ domain. Contains 1 Piwi domain.

翻译后修饰

Arginine methylation by PRMT5 is required for the interaction with Tudor domain-containing protein (TDRD1, TDRKH/TDRD2 and TDRD9) and subsequent localization to the meiotic nuage,

also named P granule.

细胞定位

Nucleus. Cytoplasm. Probable component of the meiotic nuage, also named P granule, a germ-cell-specific organelle required to repress transposon during meiosis. PIWIL2/MIL1 is required for

nuclear localization.

图片



Western blot - Anti-PIWIL4/PIWI antibody (ab21869)

All lanes: Anti-PIWIL4/PIWI antibody (ab21869) at 1 µg/ml

Lane 1 : Mouse testis tissue lysate
Lane 2 : Human testis tissue lysate
Lane 3 : Rat testis tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/50000 dilution

Predicted band size: 98 kDa **Observed band size:** 98 kDa

Additional bands at: 56,52 kDa (possible isoform), 75 kDa

(possible non-specific binding)

Exposure time: 12 minutes

Blocking buffer: 2% BSA

Gel type: MOPS

Lanes 1-2: Anti-PIWIL4/PIWI antibody (ab21869) at 2 μg/ml **Lanes 3-4**: Anti-PIWIL4/PIWI antibody (ab21869) at 1 μg/ml

Lanes 1 & 3 : Testis (Mouse) Tissue Lysate - normal tissue (ab4027)

Lanes 2 & 4 : Testis (Mouse) Tissue Lysate - normal tissue (ab4027) with Mouse PIWIL4/PIWI peptide (ab23535) at 1 μ g/ml

Lysates/proteins at 20 µg per lane.

250 kDa — 150 kDa — 100 kDa — 75 kDa — 50 kDa — 37 kDa — 25 kDa — Copyright (c) 2006 Abcam plo

Western blot - Anti-PIWIL4/PIWI antibody (ab21869)

Secondary

All lanes : Rabbit lgG secondary antibody (<u>ab28446</u>) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 98 kDa **Observed band size:** 98 kDa

ab21869 specifically recognises PIWIL4/PIWI at 98kDa, which is demonstrated by the efficient blocking by the immunizing peptide (ab23535)

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