**Anti PDILT**  
[Protein disulfide-isomerase-like protein of the testis]

**BACKGROUND**
PDILT cooperates with the testis-specific calreticulin-like chaperone, calsperin (CALR3), in the endoplasmic reticulum and plays an indispensable role in the disulfide-bond formation and folding of ADAM3. Pdilt(-/-) mice were male infertile because ADAM3 could not be folded properly and transported to the sperm surface without the PDILT/CALR3 complex.

**Product type**  
Primary antibody

**Immunogen**  
Two synthetic peptides corresponding to the C-terminal regions of mouse PDILT, C+IRKPEEPERRKETA (550-563) and C+QPKEQPKPERKLEV (571-584), respectively, conjugated with KLH

**Host Species**  
Rabbit

**Clone Designation**  
-

**Isotype**  
-

**Host**  
-

**Source**  
-

**Purification**  
-

**Form**  
Liquid

**Formulation Buffer**  
Whole rabbit antiserum, 0.1% NaN₃, as a preservative

**Concentration**  
-

**Volume**  
100 ul

**Label**  
Unlabeled

**Specificity**  
-

**Cross species reactivity**  
Mouse    Other species have not been tested.

**Storage Conditions**  
Shipped at 4°C or -20°C. Upon arrival, spin-down and store at -20°C. Aliquot to avoid cycles of freeze/thaw.

**Other**  

**Application notes**
- Western blotting: 1/1000
- Immunoprecipitation: 1/100
- Immunohistochemistry: 1/100 – 1/500 (frozen section)

  * Molecular mass: 67,759 Da with 588 amino acids. N-glucosylated

Other applications have not been tested. Optimal dilutions/concentrations should be determined by the end user.

**References**

* This antibody was described and used in Ref.1.

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ANTIBODY CHARACTERIZATION

Sperm was lysed in lysis buffer containing 1% Triton-X100 and extracts were prepared as supernatants of lysates after centrifugation. Samples were reacted with anti-PDILT antibody at 1/1,000 dilution. α-Tubulin was used as a control.

Fig. 1  Analysis of PDILT protein in testes extracts from wild-type and Pdilt knock-out mice by western blotting with anti-PDILT antibody.

Proteins were extracted from various tissues with lysis buffer containing Triton X-100 and subjected to western blot analysis. Tissue proteins (30 µg) and sperm protein (10 µg) were reacted with anti-PDILT antibody at 1/1,000 dilution.

Fig.2  Western blotting analysis of PDILT expression in various tissues with anti-PDILT antibody.

Extracts (100 µg) of wild-type (+/+ ) and Pdilt (-/-) mouse testes were immunoprecipitated with anti-PDILT antibody at 1/100 dilution and the precipitates were analyzed by western blotting using the same antibody at 1/1,000 dilution. 1. Input. 2. Wild-type. 3. Pdilt (-/-)

Fig.3  Immunoprecipitation of PDILT protein from mouse testis extracts.

Testes were collected from adult mice and were fixed in 4% paraformaldehyde/PBS, cryopreserved in graded 10-30% sucrose, and embedded in a TissueTek OCT compound (Sakura Finetechnical, Tokyo). Frozen sections (5 µm) were mounted on APS-coated glass slides. After washing and blocking, the slides were reacted with anti-PDILT antibody at 1/100 dilution. As a secondary antibody, Alexa Fluor 546 conjugated anti-rabbit IgG antibody was used. PDILT was detected only in spermatid.

Fig.4  Immunofluorescence staining of mouse testicular sections with anti-PDILT antibody.

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## RELATED PRODUCTS:

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