SANTA CRUZ BIOTECHNOLOGY, INC.

PDILT (L-15): sc-165210



BACKGROUND

PDILT (protein disulfide-isomerase-like protein of the testis), also known as PDIA7 (protein disulfide isomerase family A, member 7), is a 584 amino acid protein of the endoplasmic reticulum that is thought to function as a redoxinactive chaperone during spermatogenesis. Expressed specifically in testis, PDILT exists as a homodimer that undergoes post-translational N-glycosylation and belongs to the protein disulfide isomerase family. PDILT associates with Calmegin and Ero1-L, and is encoded by a gene that maps to human chromosome 16p12.3. Chromosome 16 encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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- 3. Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. Nat. Genet. 26: 370-374.
- Kuhlenbäumer, G., et al. 2002. Giant axonal neuropathy (GAN): case report and two novel mutations in the gigaxonin gene. Neurology 58: 1273-1276.
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CHROMOSOMAL LOCATION

Genetic locus: PDILT (human) mapping to 16p12.3; Pdilt (mouse) mapping to 7 F2.

SOURCE

PDILT (L-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PDILT of mouse origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-165210 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

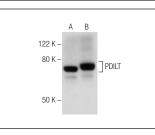
PDILT (L-15) is recommended for detection of PDILT of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PDILT siRNA (h): sc-93521, PDILT siRNA (m): sc-152138, PDILT shRNA Plasmid (h): sc-93521-SH, PDILT shRNA Plasmid (m): sc-152138-SH, PDILT shRNA (h) Lentiviral Particles: sc-93521-V and PDILT shRNA (m) Lentiviral Particles: sc-152138-V.

Molecular Weight of PDILT: 76 kDa.

Positive Controls: mouse testis extract: sc-2405 or rat testis extract: sc-2400.

DATA



PDILT (L-15): sc-165210. Western blot analysis of PDILT expression in mouse testis (\bf{A}) and rat testis (\bf{B}) tissue extracts.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.