SANTA CRUZ BIOTECHNOLOGY, INC.

PALD (A-14): sc-165181

BACKGROUND

PALD (paladin) is an 856 amino acid protein that belongs to the paladin family. The gene that encodes PALD consists of approximately 89,643 bases and maps to human chromosome 10q22.1. Spanning nearly 135 million base pairs and encoding close to 1,200 genes, chromosome 10 makes up approximately 4.5% of the human genome. Several protein-coding genes, including those that encode chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromatic deafness, Wolman's syndrome, Cowden syndrome, Cockayne syndrome, multiple endocrine neoplasia type 2 and porphyria. Tetrahydrobiopterin deficiency and a number of syndromes involving defective skull and facial bone fusion are also linked to chromosome 10.

REFERENCES

1. Troelstra, C., et al. 1992. Localization of the nucleotide excision repair gene ERCC6 to human chromosome 10q11-q21. Genomics 12: 745-749.
2. Jabs, E.W., et al. 1994. Jackson-Weiss and Crouzon syndromes are allelic with mutations in fibroblast growth factor receptor 2. Nat. Genet. 8: 275-279.
3. Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. Neurogenetics 4: 1-15.
4. Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. Am. J. Hum. Genet. 81: 756-767.
5. Cho, M.Y., et al. 2008. First report of ovarian dysgerminoma in Cowden syndrome with germline PTEN mutation and PTEN-related 10q loss of tumor heterozygosity. Am. J. Surg. Pathol. 32: 1258-1264.
6. Yin, Y., et al. 2008. PTEN: a new guardian of the genome. Oncogene 27: 5443-5453.
7. Laugel, V., et al. 2010. Mutation update for the CSB/ERCC6 and CSA/ERCC8 genes involved in Cockayne syndrome. Hum. Mutat. 31: 113-126.

CHROMOSOMAL LOCATION

Genetic locus: PALD1 (human) mapping to 10q22.1; Pald1 (mouse) mapping to 10 B4.

SOURCE

PALD (A-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PALD of human origin.

STORAGE

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

PROTOCOLS

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

PRODUCT

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

Blocking peptide available for competition studies, sc-165181 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PALD (A-14) is recommended for detection of PALD of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

PALD (A-14) is also recommended for detection of PALD in additional species, including equine and canine.

Suitable for use as control antibody for PALD siRNA (h): sc-90555, PALD siRNA (m): sc-151998, PALD shRNA Plasmid (h): sc-90555-SH, PALD shRNA Plasmid (m): sc-151998-SH, PALD shRNA (h) Lentiviral Particles: sc-90555-V and PALD shRNA (m) Lentiviral Particles: sc-151998-V.

Molecular Weight of PALD: 97 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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