SANTA CRUZ BIOTECHNOLOGY, INC.

PLEKHS1 (P-15): sc-240000



BACKGROUND

PLEKHS1 (pleckstrin homology domain-containing family S member 1), also known as C10orf81 or hEL185 (epididymis luminal protein 185), is a 462 amino acid protein that contains one PH domain. Existing as five alternatively spliced isoforms, PLEKHS1 is encoded by a gene that maps to human chromosome 10q25.3. Chromosome 10 contains over 800 genes and 135 million nucleotides, making up nearly 4.5% of the human genome. PTEN is an important tumor suppressor gene located on chromosome 10 and, when defective, causes a genetic predisposition to cancer development known as Cowden syndrome. The chromosome 10 encoded gene ERCC6 is important for DNA repair and is linked to Cockayne syndrome which is characterized by extreme photosensitivity and premature aging. Tetrahydrobiopterin deficiency and a number of syndromes involving defective skull and facial bone fusion are also linked to chromosome 10. As with most trisomies, trisomy 10 is rare and is deleterious.

REFERENCES

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- 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.
- 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.
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CHROMOSOMAL LOCATION

Genetic locus: PLEKHS1 (human) mapping to 10q25.3; Plekhs1 (mouse) mapping to 19 D2.

SOURCE

PLEKHS1 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PLEKHS1 of human origin.

STORAGE

Store at 4° C, **D0 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-240000 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PLEKHS1 (P-15) is recommended for detection of PLEKHS1 of mouse 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).

PLEKHS1 (P-15) is also recommended for detection of PLEKHS1 in additional species, including bovine and porcine.

Suitable for use as control antibody for PLEKHS1 siRNA (h): sc-90543, PLEKHS1 siRNA (m): sc-140588, PLEKHS1 shRNA Plasmid (h): sc-90543-SH, PLEKHS1 shRNA Plasmid (m): sc-140588-SH, PLEKHS1 shRNA (h) Lentiviral Particles: sc-90543-V and PLEKHS1 shRNA (m) Lentiviral Particles: sc-140588-V.

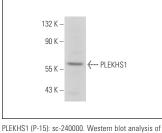
Molecular Weight of PLEKHS1: 52 kDa.

Positive Controls: U-251-MG whole cell lysate: sc-364176.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.





PLEKHS1 (P-15): sc-240000. Western blot analysis of PLEKHS1 expression in U-251-MG whole cell lysate

RESEARCH USE

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