

Perp (N-15): sc-48262

BACKGROUND

The Perp protein, also known as p53 effector related to PMP22, or THW, contains 193 amino acids and has 4 transmembrane domains, 2 extracellular domains and 3 cytoplasmic domains. Northern blot analysis using a multiple tissue array demonstrates that Perp is predominantly expressed in esophagus and trachea tissues. Perp is required for the integrity of the stratified epithelia defined by p63 (a tumor suppressor gene); expression of Perp in these structures is contingent on the presence of p63. The position of Perp downstream of p63 and p53, as well as its essential role in regular desmosome function, suggest that it, like other adhesion proteins, may be a target for mutation in human blistering diseases or cancer. Furthermore, research demonstrates that the downregulation of Perp correlates with meta-static capacity of human melanoma cell lines, indicating that Perp may be a tumor suppressor.

REFERENCES

- Hildebrandt, T., et al. 2000. Identification of THW, a putative new tumor suppressor gene. *Anticancer Res.* 20: 2801-2809.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609301. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Ihrie, R.A. and Attardi, L.D. 2004. Perpetrating p53-dependent apoptosis. *Cell Cycle* 3: 267-269.
- Nowak, M., et al. 2004. Perp is required for tissue-specific cell survival during zebrafish development. *Cell Death Differ.* 12: 52-64.
- Ceballos, E., et al. 2005. Inhibitory effect of c-Myc on p53-induced apoptosis in leukemia cells. Microarray analysis reveals defective induction of p53 target genes and upregulation of chaperone genes. *Oncogene* 24: 4559-4571.
- Ihrie, R.A. and Attardi, L.D. 2005. A new Perp in the lineup: linking p63 and desmosomal adhesion. *Cell Cycle* 4: 873-876.

CHROMOSOMAL LOCATION

Genetic locus: PERP (human) mapping to 6q23.3; Perp (mouse) mapping to 10 A3.

SOURCE

Perp (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Perp of human origin.

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-48262 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Perp (N-15) is recommended for detection of Perp of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Perp (N-15) is also recommended for detection of Perp in additional species, including canine and porcine.

Suitable for use as control antibody for Perp siRNA (h): sc-61326, Perp siRNA (m): sc-61327, Perp shRNA Plasmid (h): sc-61326-SH, Perp shRNA Plasmid (m): sc-61327-SH, Perp shRNA (h) Lentiviral Particles: sc-61326-V and Perp shRNA (m) Lentiviral Particles: sc-61327-V.

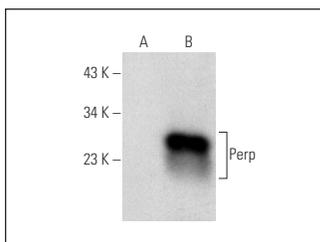
Molecular Weight of Perp: 22 kDa.

Positive Controls: Perp (h): 293T Lysate: sc-159609.

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.

DATA



Perp (N-15): sc-48262. Western blot analysis of Perp expression in non-transfected: sc-117752 (A) and human Perp transfected: sc-159609 (B) 293T whole cell lysates.

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.