

periphilin 1 (A-14): sc-163221

BACKGROUND

Periphilin 1, also known as PPHLN1 or gastric cancer antigen Ga50, is a 458 amino acid protein that interacts with periplakin, a known precursor of the cornified cell envelope. A homodimer, periphilin 1 is involved in epithelial differentiation and contributes to epidermal integrity and barrier formation. Periphilin 1 is ubiquitously expressed and localizes to nucleus and cytoplasm. Existing as eight alternatively spliced isoforms, periphilin 1 is highly insoluble and contains a putative nuclear localization signal (NLS) within its N-terminal half, a prerequisite for the formation of insoluble complexes. The N-terminal portion of periphilin 1 is followed by a possible caspase recognition sequence and the C-terminal half contains a potential nuclear export signal, which is composed of heptad repeats that form four putative alpha helices, and shares structural homology with the homodimerization domain of vitellogenin proteins. Periphilin 1 is encoded by a gene that maps to human chromosome 12q12.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Pphln1 (mouse) mapping to 15 E3.

STORAGE

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

SOURCE

periphilin 1 (A-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of periphilin 1 of mouse 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-163221 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

periphilin 1 (A-14) is recommended for detection of periphilin 1 of mouse and rat 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).

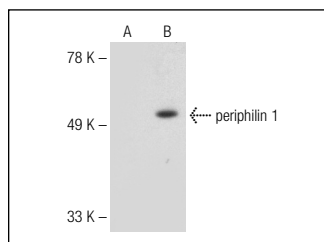
Suitable for use as control antibody for periphilin 1 siRNA (m): sc-152169, periphilin 1 shRNA Plasmid (m): sc-152169-SH and periphilin 1 shRNA (m) Lentiviral Particles: sc-152169-V.

Molecular Weight of periphilin 1 isoforms 1/2/3/4: 53/43/50/30 kDa.

Molecular Weight of periphilin 1 isoforms 5/6/7: 37/13/42 kDa.

Positive Controls: periphilin 1 (h): 293T Lysate: sc-115796.

DATA



periphilin 1 (A-14): sc-163221. Western blot analysis of periphilin 1 expression in non-transfected: sc-117752 (A) and human periphilin 1 transfected: sc-115796 (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.