

# taperin (K-18): sc-242294

## BACKGROUND

Taperin (TPRN) is a 711 amino acid sensory epithelial protein that belongs to the taperin family and exists as four alternatively spliced isoforms. While localized prominently at the taper regions of hair cell stereocilia, taperin expression is detected in fetal cochlea. Defects in taperin are the cause of deafness autosomal recessive type 79 (DFNB79), which is characterized by progressive hearing loss leading to profound deafness. The gene that encodes taperin contains approximately 9,689 bases and maps to human chromosome 9q34.3. Housing over 900 genes, chromosome 9 comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and Familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

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## CHROMOSOMAL LOCATION

Genetic locus: TPRN (human) mapping to 9q34.3.

## SOURCE

taperin (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of taperin 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-242294 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

taperin (K-18) is recommended for detection of taperin of 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).

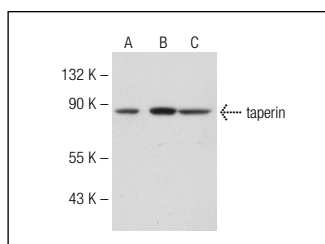
taperin (K-18) is also recommended for detection of taperin in additional species, including canine.

Suitable for use as control antibody for taperin siRNA (h): sc-92581, taperin shRNA Plasmid (h): sc-92581-SH and taperin shRNA (h) Lentiviral Particles: sc-92581-V.

Molecular Weight of taperin: 76 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or U-2 OS cell lysate: sc-2295.

## DATA



taperin (K-18): sc-242294. Western blot analysis of taperin expression in U-2 OS (A), A-431 (B) and HeLa (C) whole cell lysates.

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.