

# Talin (H-300): sc-15336

## BACKGROUND

Focal adhesions were identified as areas within the plasma membrane of tissue culture cells that adhere tightly to the underlying substrate. *In vivo*, these regions are involved in the adhesion of cells to the extracellular matrix. Paxillin and vinculin are cytoskeletal, focal adhesion proteins that are components of a protein complex that links the Actin network to the plasma membrane. Vinculin binding sites have been identified on other cytoskeletal proteins, including Talin-1 and  $\alpha$ -actinin. In addition, vinculin, Talin-1, Talin-2 and  $\alpha$ -actinin each contain Actin binding sites. Expression of vinculin, Talin-1 and Talin-2 have been shown to be affected by the level of Actin expression.  $\alpha$ -actinin has been shown to link Actin to integrins in the plasma membrane through interactions with the vinculin and Talin complex or by a direct interaction with integrin. Talin-2 is similar to Talin-1 but shows distinct patterns of expression and cannot compensate for the loss of Talin-1.

## CHROMOSOMAL LOCATION

Genetic locus: TLN1 (human) mapping to 9p13.3, TLN2 (human) mapping to 15q22.2; Tln1 (mouse) mapping to 4 B1, Tln2 (mouse) mapping to 9 C.

## SOURCE

Talin (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Talin of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Talin (H-300) is recommended for detection of Talin-1 and Talin-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Talin (H-300) is also recommended for detection of Talin-1 and Talin-2 in additional species, including equine, canine, bovine and porcine.

Molecular Weight of Talin: 230 kDa.

Positive Controls: CCD-1064Sk cell lysate: sc-2263, Hs68 cell lysate: sc-2230 or L8 cell lysate: sc-3807.

## STORAGE

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

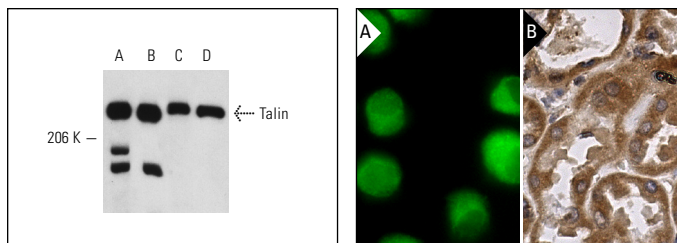
## PROTOCOLS

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

## RESEARCH USE

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

## DATA



Talin (H-300): sc-15336. Western blot analysis of Talin expression in CCD-1064Sk (A), Hs68 (B), NIH/3T3 (C) and L8 (D) whole cell lysates.

Talin (H-300): sc-15336. Immunofluorescence staining of methanol-fixed KNRK cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules (B).

## SELECT PRODUCT CITATIONS

- Miura, M., et al. 2006. OspE2 of *Shigella sonnei* is required for the maintenance of cell architecture of bacterium-infected cells. *Infect. Immun.* 74: 2587-2595.
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- Mariño-Enríquez, A., et al. 2011. ALK rearrangement in sickle cell trait-associated renal medullary carcinoma. *Genes Chromosomes Cancer* 50: 146-153.
- Nagai, Y., et al. 2013. p130Cas plays important roles in osteoclastic bone resorption. *J. Bone Miner. Res.* 28: 2449-2462.
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- Kim, K., et al. 2015. NOX2 is critical for heterotypic neutrophil-platelet interactions during vascular inflammation. *Blood* 126: 1952-1964.
- Hung, C.H., et al. 2015. Apple polyphenol inhibits colon carcinoma metastasis via disrupting Snail binding to focal adhesion kinase. *J. Funct. Foods* 12: 80-91.



Try **Talin (C-9): sc-365875** or **Talin (TA205): sc-59940**, our highly recommended monoclonal alternatives to Talin (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **Talin (C-9): sc-365875**.