## SANTA CRUZ BIOTECHNOLOGY, INC.

# Talin (C-20): sc-7534



### 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 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Talin-2 of human origin.

#### PRODUCT

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

Blocking peptide available for competition studies, sc-7534 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

Talin (C-20) 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 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).

Talin (C-20) is also recommended for detection of Talin-1 and Talin-2 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of Talin: 230 kDa.

Positive Controls: CCD-1064Sk cell lysate: sc-2263, Hs68 cell lysate: sc-2230 or NIH/3T3 whole cell lysate: sc-2210.

#### STORAGE

Store at 4° C, \*\*D0 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 or our catalog for detailed protocols and support products.

#### **RESEARCH USE**

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

#### DATA





Talin (C-20): sc-7534. Western blot analysis of Talin expression in CCD-1064Sk (A), HISM (B), Hs68 (C), Jurkat (D), L8 (E) and NIH/313 (F) whole cell lysates and mouse uterus (G) extract revealing cell-type differ-ential expression of the full-length (225 kDa) and amino-terminally deleted (190 kDa) forms.

Talin (C-20): sc-7534. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoskeletal localization.

#### SELECT PRODUCT CITATIONS

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## Try Talin (C-9): sc-365875 or Talin (TA205): sc-59940, our highly recommended monoclonal alternatives to

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our highly recommended monoclonal alternatives to Talin (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **Talin (C-9):** sc-365875.