Talin-1 (YQ-16): sc-81805

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 andvinculin 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 α-actinin. In addition, vinculin, Talin-1, Talin-2 and α-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. α-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; Tln1 (mouse) mapping to 4 B1.

SOURCE

Talin-1 (YQ-16) is a mouse monoclonal antibody raised against recombinant Talin-1 of human origin.

PRODUCT

Each vial contains 100 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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.

APPLICATIONS

Talin-1 (YQ-16) is recommended for detection of Talin-1 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), 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).

Suitable for use as control antibody for Talin-1 siRNA (h): sc-36610, Talin-1 siRNA (m): sc-36611, Talin-1 shRNA Plasmid (h): sc-36610-SH, Talin-1 shRNA Plasmid (m): sc-36611-SH, Talin-1 shRNA (h) Lentiviral Particles: sc-36610-V and Talin-1 shRNA (m) Lentiviral Particles: sc-36611-V.

Molecular Weight of Talin-1: 230 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

DATA

SELECT PRODUCT CITATIONS


See Talin (C-9): sc-365875 for Talin antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.