

Zyxin (C-19): sc-6437

BACKGROUND

Zyxin is a low abundance phosphoprotein localized to focal adhesion plaques and is thought to perform regulatory functions at these regions. The protein contains a number of proline-rich sequences as well as three LIM domains, zinc finger domains involved in protein binding. Zyxin interacts with several other proteins at cell adhesion sites, including members of the CRP (cysteine-rich protein) LIM domain containing protein family. The proline-rich domain of Zyxin associates with an SH3 domain of p95 Vav, but not with similar SH3 domains containing proteins such as GRB2 or PLC γ . Zyxin has also been shown to interact with the focal adhesion protein VASP and may assist in the targeting of VASP to focal adhesions, microfilaments and membrane regions of high dynamic activity. Zyxin may contribute to the organization of the Actin cytoskeleton in mammalian cells.

CHROMOSOMAL LOCATION

Genetic locus: ZYX (human) mapping to 7q34; Zyx (mouse) mapping to 6 B2.1.

SOURCE

Zyxin (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Zyxin of human origin.

PRODUCT

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

Zyxin (C-19) is available conjugated either phycoerythrin (sc-6437 PE, 200 μ g/ml), Alexa Fluor[®] 488 (sc-6437 AF488, 200 μ g/ml) or Alexa Fluor[®] 647 (sc-6437 AF647, 200 μ g/ml), for IF, IHC(P) and FCM.

In addition, Zyxin (C-19) is available conjugated to Alexa Fluor[®] 405 (sc-6437 AF405), 100 μ g/2 ml, for IF, IHC(P) and FCM.

Blocking peptide available for competition studies, sc-6437 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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APPLICATIONS

Zyxin (C-19) is recommended for detection of Zyxin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 μ g per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Zyxin (C-19) is also recommended for detection of Zyxin in additional species, including canine and porcine.

Suitable for use as control antibody for Zyxin siRNA (h): sc-36370, Zyxin siRNA (m): sc-36373, Zyxin shRNA Plasmid (h): sc-36370-SH, Zyxin shRNA Plasmid (m): sc-36373-SH, Zyxin shRNA (h) Lentiviral Particles: sc-36370-V and Zyxin shRNA (m) Lentiviral Particles: sc-36373-V.

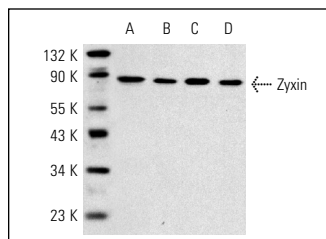
Molecular Weight of Zyxin: 82 kDa.

Positive Controls: Sol8 cell lysate: sc-2249 or A-10 cell lysate: sc-3806.

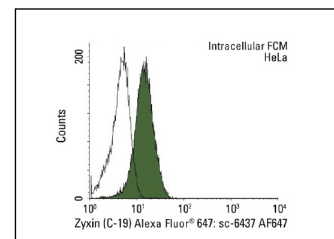
STORAGE

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

DATA



Zyxin (C-19): sc-6437. Western blot analysis of Zyxin expression in CCD-1064Sk (A), NIH/3T3 (B), Sol8 (C) and A-10 (D) whole cell lysates.



Zyxin (C-19) Alexa Fluor[®] 647: sc-6437 AF647. Intracellular FCM analysis of fixed and permeabilized HeLa cells. Black line histogram represents the isotype control, normal goat IgG: sc-45066.

SELECT PRODUCT CITATIONS

- Conley, B.A. 2004. Endoglin controls cell migration and composition of focal adhesions: function of the cytosolic domain. *J. Biol. Chem.* 279: 27440-27449.
- Lee, N.P., et al. 2004. Zyxin, Axin, and Wiskott-Aldrich syndrome protein are adaptors that link the cadherin/catenin protein complex to the cytoskeleton at adherens junctions in the seminiferous epithelium of the rat testis. *J. Androl.* 25: 200-215.
- Mruk, D.D. and Cheng, C.Y. 2004. Sertoli-Sertoli and Sertoli-germ cell interactions and their significance in germ cell movement in the seminiferous epithelium during spermatogenesis. *Endocr. Rev.* 25: 747-806.
- Morita, T., et al. 2007. Reorganization of the actin cytoskeleton via transcriptional regulation of cytoskeletal/focal adhesion genes by myocardium-related transcription factors (MRTFs/MAL/MKLs). *Exp. Cell Res.* 313: 3432-3445.
- Corsino, P.E., et al. 2008. Mammary tumors initiated by constitutive Cdk2 activation contain an invasive basal-like component. *Neoplasia* 10: 1240-1252.

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.

MONOS
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Try **Zyxin (2D1): sc-293448**, our highly recommended monoclonal alternative to Zyxin (C-19).