

Zyxin (N-19): sc-6438

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.

REFERENCES

1. Sadler, I., et al. 1992. Zyxin and cCRP: two interactive LIM domain proteins associated with the cytoskeleton. *J. Cell Biol.* 119: 1573-1587.
2. Reinhard, M., et al. 1995. Identification, purification, and characterization of a Zyxin-related protein that binds the focal adhesion and microfilament protein VASP (vasodilator-stimulated phosphoprotein). *Proc. Natl. Acad. Sci. USA* 92: 7956-7960.
3. Macalma, T., et al. 1996. Molecular characterization of human Zyxin. *J. Biol. Chem.* 271: 31470-31478.

CHROMOSOMAL LOCATION

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

SOURCE

Zyxin (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-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 (N-19) is available conjugated either phycoerythrin (sc-6438 PE, 200 μ g/ml), Alexa Fluor[®] 488 (sc-6438 AF488, 200 μ g/ml) or Alexa Fluor[®] 647 (sc-6438 AF647, 200 μ g/ml), for IF, IHC(P) and FCM.

In addition, Zyxin (N-19) is available conjugated to Alexa Fluor[®] 405 (sc-6438 AF405), 100 μ g/2 ml, for IF, IHC(P) and FCM.

Blocking peptide available for competition studies, sc-6438 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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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

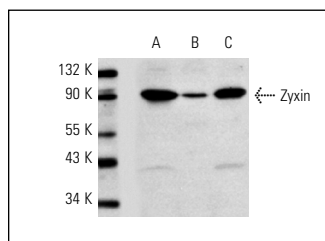
Zyxin (N-19) is recommended for detection of Zyxin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 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).

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.

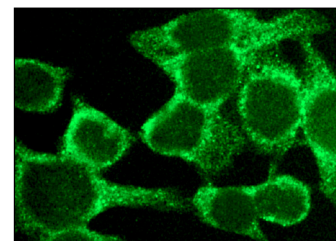
Molecular Weight of Zyxin: 82 kDa.

Positive Controls: CCD-1064Sk cell lysate: sc-2263, HeLa whole cell lysate: sc-2200 or Hs68 cell lysate: sc-2230.

DATA



Zyxin (N-19): sc-6438. Western blot analysis of Zyxin expression in CCD-1064Sk (A), HeLa (B) and Hs68 (C) whole cell lysates.



Zyxin (N-19): sc-6438. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

1. Hung, J.J., et al. 2002. Molecular chaperone HSP 90 is important for vaccinia virus growth in cells. *J. Virol.* 76: 1379-1390.
2. van der Gaag, E.J., et al. 2002. Role of Zyxin in differential cell spreading and proliferation of melanoma cells and melanocytes. *J. Invest. Dermatol.* 118: 246-254.
3. Turner, D.P., et al. 2008. Global gene expression analysis identifies PDEF transcriptional networks regulating cell migration during cancer progression. *Mol. Biol. Cell* 19: 3745-3757.
4. Wagner, N., et al. 2008. The Wilms' tumor suppressor WT1 is associated with melanoma proliferation. *Pflugers Arch.* 455: 839-847.
5. Crone, J., et al. 2011. Zyxin is a critical regulator of the apoptotic HIPK2-p53 signaling axis. *Cancer Res.* 71: 2350-2359.

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