

# fish (M-20): sc-9945

## BACKGROUND

Fish, a potential Src substrate, is a broadly expressed adaptor protein containing five SH3 domains and a phox homology (PX) domain. The Src family of protein tyrosine kinases act in signal transduction pathways. Src kinases vary in expression but are strongly regulated *in vivo*; catalytic activity is repressed by interacting with the SH3 domain. In Src-transformed fibroblasts and in normal cells treated with certain growth factors fish is tyrosine-phosphorylated. Treatment of cells with cytochalasin D results in rapid tyrosine phosphorylation of fish, along with activation of Src. Fish is likely to be involved in tyrosine kinase signaling and may have a role in cytoskeletal changes.

## REFERENCES

1. Bolen, J.B., et al. 1992. The Src family of tyrosine protein kinases in hemopoietic signal transduction. *FASEB J.* 6: 3403-3409.
2. Epel, T. and Courtneidge, S.A. 1995. Src family protein tyrosine kinases and cellular signal transduction pathways. *Curr. Opin. Cell Biol.* 7: 176-182.
3. Superti-Furga, G. and Courtneidge, S.A. 1995. Structure-function relationships in Src family and related protein tyrosine kinases. *Bioessays* 17: 321-330.
4. Dikic, I., et al. 1996. A role for Pyk2 and Src in linking G protein-coupled receptors with MAP kinase activation. *Nature* 383: 547-550.
5. Luttrell, L.M., et al. 1996. Role of c-Src tyrosine kinase in G protein-coupled receptor- and G<sub>βγ</sub> subunit-mediated activation of mitogen-activated protein kinases. *J. Biol. Chem.* 271: 19443-19450.
6. Brown, M.T. and Cooper, J.A. 1996. Regulation, substrates and functions of Src. *Biochim. Biophys. Acta* 1287: 121-149.

## CHROMOSOMAL LOCATION

Genetic locus: SH3PXD2A (human) mapping to 10q24.33; Sh3pxd2a (mouse) mapping to 19 C3.

## SOURCE

fish (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of fish of mouse origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-9945 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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

fish (M-20) is recommended for detection of fish 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).

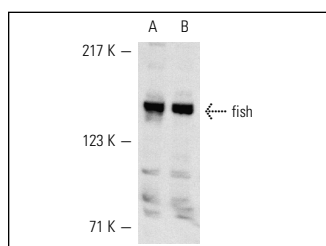
fish (M-20) is also recommended for detection of fish in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for fish siRNA (h): sc-35376, fish siRNA (m): sc-35377, fish shRNA Plasmid (h): sc-35376-SH, fish shRNA Plasmid (m): sc-35377-SH, fish shRNA (h) Lentiviral Particles: sc-35376-V and fish shRNA (m) Lentiviral Particles: sc-35377-V.

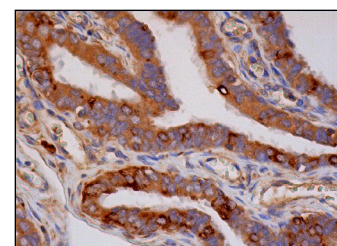
Molecular Weight of fish: 140 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

## DATA



fish (M-20): sc-9945. Western blot analysis of fish expression in HeLa (A) and K-562 (B) whole cell lysates.



fish (M-20): sc-9945. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic staining of glandular cells.

## SELECT PRODUCT CITATIONS

1. Lynch, D.K., et al. 2003. A Cortactin-CD2-associated protein (CD2AP) complex provides a novel link between epidermal growth factor receptor endocytosis and the actin cytoskeleton. *J. Biol. Chem.* 278: 21805-21813.

## PROTOCOLS

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



Try **fish (G-7): sc-376211**, our highly recommended monoclonal alternative to fish (M-20).