SANTA CRUZ BIOTECHNOLOGY, INC.

fish (M-300): sc-30122

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. Erpel, T. and Courtneidge, S.A. 1995. Src family protein tyrosine kinases and cellular signal transduction pathways. Curr. Opin. Cell Biol. 7: 176-182.

CHROMOSOMAL LOCATION

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

SOURCE

fish (M-300) is a rabbit polyclonal antibody raised against amino acids 825-1124 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.

STORAGE

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

APPLICATIONS

fish (M-300) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

fish (M-300) is also recommended for detection of fish in additional species, including porcine.

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.

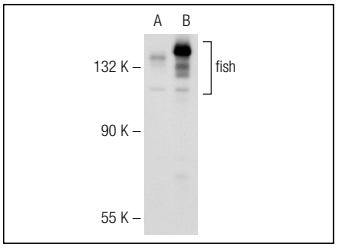
Molecular Weight of fish: 140 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, fish (h): 293T Lysate: sc-128624 or K-562 whole cell lysate: sc-2203.

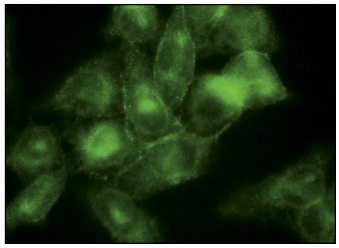
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



fish (M-300): sc-30122. Western blot analysis of fish expression in non-transfected: sc-117752 (**A**) and human fish transfected: sc-128624 (**B**) 293T whole cell lysates.



fish (M-300): sc-30122. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane and cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Chan, K.T., et al. 2009. FAK alters invadopodia and focal adhesion composition and dynamics to regulate breast cancer invasion. J. Cell Biol. 185: 357-370.
2. Oser, M., et al. 2010. Specific tyrosine phosphorylation sites on cortactin regulate Nck1-dependent actin polymerization in invadopodia. J. Cell Sci. 123: 3662-3673.
3. Juin, A., et al. 2011. Physiological type I collagen organization induces the formation of a novel class of linear invadosomes. Mol. Biol. Cell 23: 297-309.
4. Daubon, T., et al. 2012. Invadopodia and rolling-type motility are specific features of highly invasive $p190^{bcr\text{-}abl}$ leukemic cells. Eur. J. Cell Biol. 91: 978-987.

RESEARCH USE

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