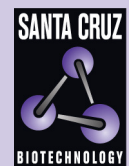


**FYCO1 (N-18): sc-79949**

The Power to Question

**BACKGROUND**

FYCO1 (FYVE and coiled-coil domain containing 1), also known as ZFYVE7 or RUFY3, is a 1,478 amino acid protein that contains one RUN domain, one GOLD domain and one FYVE-type zinc finger. Expressed in heart and skeletal muscle, FYCO1 exists as multiple alternatively spliced isoforms and may play a role in transcriptional regulation events. In response to DNA damage, FYCO1 is subject to phosphorylation, probably by ATM or ATR. The gene encoding FYCO1 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Marfan Syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

**REFERENCES**

- Goutebroze, L., et al. 2001. Assignment of the schwannomin-interacting protein 1 (SCHIP1) gene to human chromosome band 3q25 by *in situ* hybridization and with somatic cell hybrids. *Cytogenet. Cell Genet.* 94: 96-97.
- Kiss, H., et al. 2002. The transcriptional map of the common eliminated region 1 (C3CER1) in 3p21.3. *Eur. J. Hum. Genet.* 10: 52-61.
- Stahelin, R.V., et al. 2002. Phosphatidylinositol 3-phosphate induces the membrane penetration of the FYVE domains of VPS27P and Hrs. *J. Biol. Chem.* 277: 26379-26388.
- Kiss, H., et al. 2002. Comparative human/murine sequence analysis of the common eliminated region 1 from human 3p21.3. *Mamm. Genome* 13: 646-655.
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**CHROMOSOMAL LOCATION**

Genetic locus: FYCO1 (human) mapping to 3p21.31; Fyco1 (mouse) mapping to 9 F4.

**SOURCE**

FYCO1 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of FYCO1 of human 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-79949 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-79949 X, 200 µg/0.1 ml.

**RESEARCH USE**

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

**APPLICATIONS**

FYCO1 (N-18) is recommended for detection of FYCO1 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).

FYCO1 (N-18) is also recommended for detection of FYCO1 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for FYCO1 siRNA (h): sc-75070, FYCO1 siRNA (m): sc-75071, FYCO1 shRNA Plasmid (h): sc-75070-SH, FYCO1 shRNA Plasmid (m): sc-75071-SH, FYCO1 shRNA (h) Lentiviral Particles: sc-75070-V and FYCO1 shRNA (m) Lentiviral Particles: sc-75071-V.

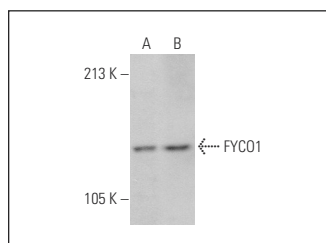
FYCO1 (N-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of FYCO1: 167 kDa.

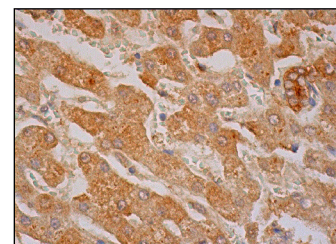
Positive Controls: Jurkat whole cell lysate: sc-2204 or MDA-MB-435S whole cell lysate: sc-364184.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

**DATA**

FYCO1 (N-18): sc-79949. Western blot analysis of FYCO1 expression in Jurkat (A) and MDA-MB-435S (B) whole cell lysates.



FYCO1 (N-18): sc-79949. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining of hepatocytes and bile duct cells.

**STORAGE**

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