

TIAF-1 (C-15): sc-82043

BACKGROUND

TIAF-1 (TGFβ1-induced antiapoptotic factor 1), also known as MYO18A, MAJN or MYS PDZ, is a TGFβ1-induced anti-apoptotic factor that localizes to the nucleus and functions to inhibit the cytotoxic effects of TNFα, TRADD and FADD. Two isoforms of mouse TIAF-1 exist and are designated MysPDZ-α and MysPDZ-β. MysPDZ-α consists of a KE-rich region, an N-terminal PDZ domain and a prevalent myosin homologous head region, while the MysPDZ-β isoform lacks the KE-rich region and PDZ domain. MysPDZ-α is present in most tissues and is known to co-localize with the ER-Golgi complex and with membrane ruffles and filopodia. MysPDZ-β is expressed specifically in hematopoietic tissues and cell lines and shows dispersed localization in the cytoplasm.

REFERENCES

- Mori, K., Furusawa, T., Okubo, T., Inoue, T., Ikawa, S., Yanai, N., Mori, K.J. and Obinata, M. 2003. Genome structure and differential expression of two isoforms of a novel PDZ-containing myosin (MysPDZ) (Myo18A). *J. Biochem.* 133: 405-413.
- Cross, M., Csar, X.F., Wilson, N.J., Manes, G., Addona, T.A., Marks, D.C., Whitty, G.A., Ashman, K. and Hamilton, J.A. 2004. A novel 110 kDa form of myosin XVIIIa (MysPDZ) is tyrosine-phosphorylated after colony-stimulating factor-1 receptor signalling. *Biochem. J.* 380: 243-253.
- Yang, C.H., Szeliga, J., Jordan, J., Fasje, S., Sever-Chroneos, Z., Dorsett, B., Christian, R.E., Settlege, R.E., Shabanowitz, J., Hunt, D.F., Whitsett, J.A. and Chroneos, Z.C. 2005. Identification of the surfactant protein A receptor 210 as the unconventional Myosin XVIIIa. *J. Biol. Chem.* 280: 34447-34457.
- Isogawa, Y., Kon, T., Inoue, T., Ohkura, R., Yamakawa, H., Ohara, O. and Sutoh, K. 2005. The N-terminal domain of MYO18A has an ATP-insensitive Actin-binding site. *Biochemistry* 44: 6190-6196.
- Mori, K., Matsuda, K., Furusawa, T., Kawata, M., Inoue, T. and Obinata, M. 2005. Subcellular localization and dynamics of MysPDZ (Myo18A) in live mammalian cells. *Biochem. Biophys. Res. Commun.* 326: 491-498.
- Walz, C., Chase, A., Schoch, C., Weisser, A., Schlegel, F., Hochhaus, A., Fuchs, R., Schmitt-Gräff, A., Hehlmann, R., Cross, N.C. and Reiter, A. 2005. The t(8;17)(p11;q23) in the 8p11 myeloproliferative syndrome fuses MYO18A to FGFR1. *Leukemia* 19: 1005-1009.

CHROMOSOMAL LOCATION

Genetic locus: TIAF1 (human) mapping to 17q11.2; Tiaf1 (mouse) mapping to 11.

SOURCE

TIAF-1 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of TIAF-1 of human origin.

STORAGE

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

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-82043 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TIAF-1 (C-15) is recommended for detection of TIAF-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for TIAF-1 siRNA (h): sc-76660, TIAF-1 shRNA Plasmid (h): sc-76660-SH and TIAF-1 shRNA (h) Lentiviral Particles: sc-76660-V.

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) 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.

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.