## SANTA CRUZ BIOTECHNOLOGY, INC.

# JFC1 (A-19): sc-23259



## BACKGROUND

Synaptotagmins, rabphilin-3A and DOC2 belong to a family of C-terminal type (C-type) tandem C2 proteins and are involved in vesicular trafficking. JFC1, also designated Slp1 (for synaptotagmin-like protein), belong to a unique family of C-type tandem C2 proteins designated Slp. JFC1 contains two N-terminal Slp homology comains (SHD), which each comprise two conserved  $\alpha$ -helical regions, desigated SHD1 and SHD2. SHD1 and SHD2 specifically and directly bind the GTP-bound form of Rab 27a. JFC1 also binds phosphatidylinositol 3,4,5-triphosphate-binding ATPase. JFC1 is transcriptionally activated by Nf $\kappa$ B and upregulated by TNF $\alpha$  in prostate carcinoma cells. JFC1 associates with the plasma membrane.

## REFERENCES

- Fukuda, M. and Mikoshiba, K. 2001. Synaptotagmin-like protein 1-3: a novel family of C-terminal-type tandem C2 proteins. Biochem. Biophys. Res. Commun. 281: 1226-1233.
- Fukuda, M., et al. 2001. Novel splicing isoforms of synaptotagmin-like proteins 2 and 3: identification of the Slp homology domain. Biochem. Biophys. Res. Commun. 283: 513-519.
- McAdara Berkowitz, J.K., et al. 2001. JFC1, a novel tandem C2 domaincontaining protein associated with the leukocyte NADPH oxidase. J. Biol. Chem. 276: 18855-18862.
- Kuroda, T.S., et al. 2002. The Slp homology domain of synaptotagmin-like proteins 1-4 and Slac2 functions as a novel Rab 27A binding domain. J. Biol. Chem. 277: 9212-9218.
- Strom, M., et al. 2002. A family of Rab 27-binding proteins. Melanophilin links Rab 27A and myosin Va function in melanosome transport. J. Biol. Chem. 277: 25423-25430.
- Fukuda, M. and Kuroda, T.S. 2002. Synaptotagmin-like protein homologue lacking C2 domains-c (Slac2-c), a novel linker protein that interacts with Rab 27, myosin Va/VIIa, and actin. J. Biol. Chem. 277: 43096-43103.

## CHROMOSOMAL LOCATION

Genetic locus: SYTL1 (human) mapping to 1p36.11.

## SOURCE

JFC1 (A-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of JFC1 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23259 P, (100  $\mu$ g 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.

#### APPLICATIONS

JFC1 (A-19) is recommended for detection of JFC1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

JFC1 (A-19) is also recommended for detection of JFC1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for JFC1 siRNA (h): sc-40717, JFC1 shRNA Plasmid (h): sc-40717-SH and JFC1 shRNA (h) Lentiviral Particles: sc-40717-V.

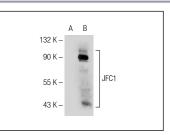
Molecular Weight of JFC1: 62 kDa.

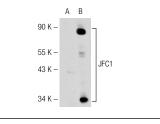
Positive Controls: JFC1 (h): 293T Lysate: sc-115358.

## **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.

#### DATA





JFC1 (A-19): sc-23259. Western blot analysis of JFC1 expression in non-transfected: sc-117752 (**A**) and human JFC1 transfected: sc-171841 (**B**) 293T whole cell lysates.

JFC1 (A-19): sc-23259. Western blot analysis of JFC1 expression in non-transfected: sc-117752 (A) and human JFC1 transfected: sc-115358 (B) 293T whole cell lysates.

### **RESEARCH USE**

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

# MONOS Satisfation Guaranteed

Try JFC1 (E-8): sc-365933 or JFC1 (F-6): sc-365657, our highly recommended monoclonal alternatives to JFC1 (A-19).