

JFC1 (N-18): sc-23258

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 domains (SHD), which each comprise two conserved α -helical regions, designated 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 $\text{Nf}\kappa\text{B}$ and upregulated by $\text{TNF}\alpha$ in prostate carcinoma cells. JFC1 associates with the plasma membrane.

REFERENCES

1. 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.
2. 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.
3. 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.
4. McAdara Berkowitz, J.K., et al. 2001. JFC1, a novel tandem C2 domain-containing protein associated with the leukocyte NADPH oxidase. *J. Biol. Chem.* 276: 18855-18862.
5. 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.
6. 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.
7. Catz, S.D., et al. 2002. JFC1 is transcriptionally activated by nuclear factor κB and up-regulated by tumor necrosis factor α in prostate carcinoma cells. *Biochem. J.* 367: 791-799.
8. Catz, S.D., et al. 2002. The C2A domain of JFC1 binds to 3'-phosphorylated phosphoinositides and directs plasma membrane association in living cells. *Proc Natl. Acad. Sci. USA* 99: 11652-11657.

CHROMOSOMAL LOCATION

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

SOURCE

JFC1 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of JFC1 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-23258 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

JFC1 (N-18) 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 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).

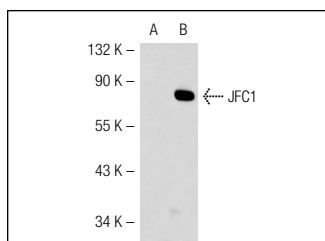
JFC1 (N-18) is also recommended for detection of JFC1 in additional species, including equine, canine, bovine and porcine.

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.

DATA



JFC1 (N-18): sc-23258. 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **JFC1 (E-8): sc-365933** or **JFC1 (F-6): sc-365657**, our highly recommended monoclonal alternatives to JFC1 (N-18).