

FAF1 (92-B): sc-101255

BACKGROUND

In contrast to growth factors which promote cell proliferation, FAS ligand (FAS-L) and the tumor necrosis factors (TNFs) rapidly induce apoptosis. Cellular response to FAS-L and TNF is mediated by structurally related receptors containing a conserved "death domain" and belonging to the TNF receptor super-family. TRADD, FADD and RIP are FAS/TNF-RI interacting proteins that contain a death domain homologous region (DDH). TRADD (TNF-RI-associated death domain) and FADD (FAS-associated death domain) associate with the death domains of both FAS and TNF-RI via their DDH regions, while RIP associates exclusively with FAS. An additional FAS interacting protein designated FAF1, for FAS-associated protein factor-1, binds with the cytoplasmic tail of wildtype but not LPR mutant FAS. When overexpressed in cells, FAF1 enhances the efficiency of FAS-mediated apoptosis. In contrast to TRADD, FADD and RIP, FAF1 lacks a DDH and cannot induce apoptosis independently of FAS activation.

REFERENCES

1. Nagata, S. and Golstein, P. 1995. The FAS death factor. *Science* 267: 1449-1456.
2. Sato, T., Irie, S., Kitada, S. and Reed, J.C. 1995. FAF-1: a protein tyrosine phosphatase that associates with FAS. *Science* 268: 411-414.
3. Cleveland, J.L. and Ihle, J.N. 1995. Contenders in FASL/TNF death signaling. *Cell* 81: 479-482.
4. Hsu, H., Xiong, J. and Goeddel, D.V. 1995. The TNF receptor 1-associated protein TRADD signals cell death and NF κ B activation. *Cell* 81: 495-504.
5. Chinnaiyan, A.M., O'Rourke, K., Tewari, M. and Dixit, V.M. 1995. FADD, a novel death domain-containing protein, interacts with the death domain of FAS and initiates apoptosis. *Cell* 81: 505-512.
6. Stanger, B.Z., Leder, P., Lee, T.H., Kim, E. and Seed, B. 1995. RIP: a novel protein containing a death domain that interacts with FAS/APO-1 (CD95) in yeast and causes cell death. *Cell* 81: 513-523.
7. Baker, S.J. and Reddy, E.P. 1996. Transducers of life and death: TNF receptor superfamily and associated proteins. *Oncogene* 12: 1-9.
8. Chu, K., Niu, X.H. and Williams, L.T. 1995. A FAS-associated protein factor, FAF1, potentiates FAS-mediated apoptosis. *Proc. Natl. Acad. Sci. USA* 92: 11894-11898.

CHROMOSOMAL LOCATION

Genetic locus: FAF1 (human) mapping to 1p32.3; Faf1 (mouse) mapping to 4 C7.

SOURCE

FAF1 (92-B) is a mouse monoclonal antibody raised against recombinant FAF1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ kappa light chain in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

FAF1 (92-B) is recommended for detection of FAF1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

Suitable for use as control antibody for FAF1 siRNA (h): sc-37520, FAF1 siRNA (m): sc-37521, FAF1 shRNA Plasmid (h): sc-37520-SH, FAF1 shRNA Plasmid (m): sc-37521-SH, FAF1 shRNA (h) Lentiviral Particles: sc-37520-V and FAF1 shRNA (m) Lentiviral Particles: sc-37521-V.

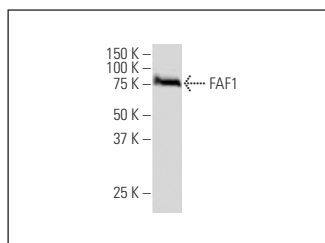
Molecular Weight of FAF1: 75-80 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

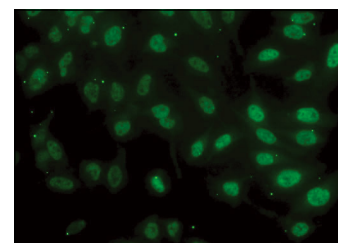
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



FAF1 (92-B): sc-101255. Western blot analysis of FAF1 expression in HeLa whole cell lysate.



FAF1 (92-B): sc-101255. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear localization.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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