SANTA CRUZ BIOTECHNOLOGY, INC.

FAF1 (A-16): sc-1886

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 superfamily. 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 wild type 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., et al. 1995. The FAS death factor. Science 267: 1449-1456.
2. Sato, T., et al. 1995. FAP-1: a protein tyrosine phosphatase that associates with FAS. Science 268: 411-414.
3. Cleveland, J.L., et al. 1995. Contenders in FAS-L/TNF death signaling. Cell 81: 479-482.
4. Hsu, H., et al. 1995. The TNF receptor 1-associated protein TRADD signals cell death and NFκB activation. Cell 81: 495-504.
5. Chinnaiyan, A.M., et al. 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., et al. 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.

CHROMOSOMAL LOCATION

Genetic locus: FAF1 (human) mapping to 1p33; Faf1 (mouse) mapping to 4 C7.

SOURCE

FAF1 (A-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of FAF1 of mouse 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-1886 P, (100 µg 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

FAF1 (A-16) 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), 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).

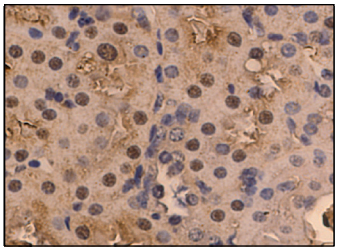
FAF1 (A-16) is also recommended for detection of FAF1 in additional species, including canine.

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: Mouse kidney extract: sc-2255, HeLa whole cell lysate: sc-2200 or mouse thymus extract: sc-2406.

DATA



FAF1 (A-16): sc-1886. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse kidney tissue showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Seko, Y., et al. 2002. Role of FAS/FAS-L pathway in the activation of infiltrating cells in murine acute myocarditis caused by coxsackievirus B3. J. Am. Coll. Cardiol. 39: 1399-1403.
2. Altomare, D.A., et al. 2009. Activated TNFα/NFκB signaling via down-regulation of FAS-associated factor 1 in asbestos-induced mesotheliomas from ARF knockout mice. Proc. Natl. Acad. Sci. USA 106: 3420-3425.

RESEARCH USE

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

MONOS Satisfaction Guaranteed

Try **FAF1 (E-4): sc-393965** or **FAF1 (92-B): sc-101255**, our highly recommended monoclonal alternatives to FAF1 (A-16).