SANTA CRUZ BIOTECHNOLOGY, INC.

FAS (FL-335): sc-7886

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Cytotoxic T lymphocyte (CTL)-mediated cytotoxicity constitutes an important component of specific effector mechanisms in immuno-surveillance against virus-infected or transformed cells. Two mechanisms appear to account for this activity, one of which is the perforin-based process. Independently, a FAS-based mechanism involves the transducing molecule FAS (also designated APO-1) and its ligand (FAS-L). The human FAS protein is a cell surface glycoprotein that belongs to a family of receptors that includes CD40, nerve growth factor receptors and tumor necrosis factor receptors. The FAS antigen is expressed on a broad range of lymphoid cell lines, certain of which undergo apoptosis in response to treatment with antibody to FAS. These findings strongly imply that targeted cell death is potentially mediated by the intercellular interactions of FAS with its ligand or effectors, and that FAS may be critically involved in CTL-mediated cytotoxicity.

CHROMOSOMAL LOCATION

Genetic locus: FAS (human) mapping to 10q23.31; Fas (mouse) mapping to 19 C1.

SOURCE

FAS (FL-335) is a rabbit polyclonal antibody raised against amino acids 1-335 representing full length FAS of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

FAS (FL-335) is recommended for detection of FAS of mouse, rat and 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).

Suitable for use as control antibody for FAS siRNA (h): sc-29311, FAS siRNA (m): sc-29312, FAS shRNA Plasmid (h): sc-29311-SH, FAS shRNA Plasmid (m): sc-29312-SH, FAS shRNA (h) Lentiviral Particles: sc-29311-V and FAS shRNA (m) Lentiviral Particles: sc-29312-V.

Molecular Weight of FAS: 48 kDa.

Positive Controls: FAS (h): 293T Lysate: sc-113770, Jurkat whole cell lysate: sc-2204 or A-431 whole cell lysate: sc-2201.

STORAGE

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

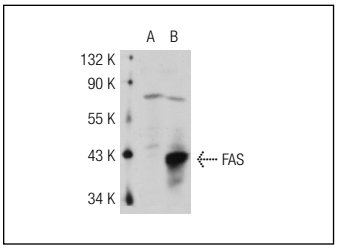
PROTOCOLS

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

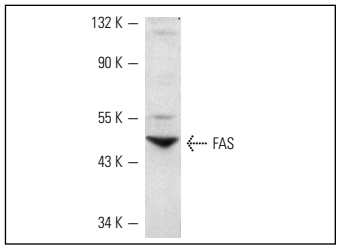
RESEARCH USE

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

DATA



FAS (FL-335): sc-7886. Western blot analysis of FAS expression in non-transfected: sc-117752 (**A**) and human FAS transfected: sc-113770 (**B**) 293T whole cell lysates.



FAS (FL-335): sc-7886. Western blot analysis of FAS expression in Jurkat whole cell lysate.

SELECT PRODUCT CITATIONS

1. Huigsloot, M., et al. 2002. Differential regulation of doxorubicin-induced mitochondrial dysfunction and apoptosis by Bcl-2 in mammary adenocarcinoma (MTLn3) cells. J. Biol. Chem. 277: 35869-35879.
2. Hou, S.T., et al. 2002. Activation of the Rb/E2F-1 pathway by the non-proliferative p38 MAPK during FAS (APO1/CD95)-mediated neuronal apoptosis. J. Biol. Chem. 277: 48764-48770.
3. Pucci, B., et al. 2002. pRb2/p130 promotes radiation-induced cell death in the glioblastoma cell line HJC12 by p73 upregulation and Bcl-2 downregulation. Oncogene 21: 5897-5905.
4. Wang, X., et al. 2010. Changes in the level of apoptosis-related proteins in Jurkat cells infected with HIV-1 versus HIV-2. Mol. Cell. Biochem. 337: 175-183.
5. Cardoso, M.L., et al. 2010. Morphological and biochemical changes during formocresol induced cell death in murine peritoneal macrophages: apoptotic and necrotic features. Cell Biol. Toxicol. 26: 445-455.
6. Wueest, S., et al. 2010. Deletion of Fas in adipocytes relieves adipose tissue inflammation and hepatic manifestations of obesity in mice. J. Clin. Invest. 120: 191-202.
7. Go, H., et al. 2010. A glycoprotein from *Laminaria japonica* induces apoptosis in HT-29 colon cancer cells. Toxicol. In Vitro 24: 1546-1553.
8. Jin, X., et al. 2010. Apoptosis-inducing activity of the antimicrobial peptide cecropin of *Musca domestica* in human hepatocellular carcinoma cell line BEL-7402 and the possible mechanism. Acta Biochim. Biophys. Sin. 42: 259-265.
9. Wang, H.C., et al. 2011. Solanum nigrum L. polyphenolic extract inhibits hepatocarcinoma cell growth by inducing G_2/M phase arrest and apoptosis. J. Sci. Food Agric. 91: 178-185.
10. Nicolini, V., et al. 2011. Interplay between Ret and Fap-1 regulates CD95-mediated apoptosis in medullary thyroid cancer cells. Biochem. Pharmacol. 82: 778-788.