SANTA CRUZ BIOTECHNOLOGY, INC.

FAS-L (N-20): sc-834

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: FASLG (human) mapping to 1q24.3; Fasl (mouse) mapping to 1 H2.1.

SOURCE

FAS-L (N-20) is available as either rabbit (sc-834) or goat (sc-834-G) polyclonal affinity purified antibody raised against a peptide mapping at the N-terminus of FAS-L of rat 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-834 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FAS-L (N-20) is recommended for detection of FAS-L 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).

FAS-L (N-20) is also recommended for detection of FAS-L in additional species, including porcine.

Suitable for use as control antibody for FAS-L siRNA (h): sc-29313, FAS-L siRNA (m): sc-35358, FAS-L shRNA Plasmid (h): sc-29313-SH, FAS-L shRNA Plasmid (m): sc-35358-SH, FAS-L shRNA (h) Lentiviral Particles: sc-29313-V and FAS-L shRNA (m) Lentiviral Particles: sc-35358-V.

Molecular Weight of soluble FAS-L: 26 kDa.

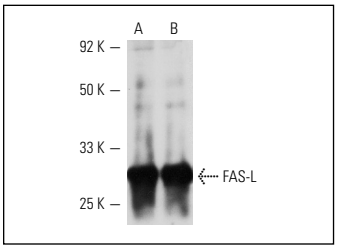
Molecular Weight of FAS-L membrane-bound: 40 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HL-60 whole cell lysate: sc-2209 or Jurkat whole cell lysate: sc-2204.

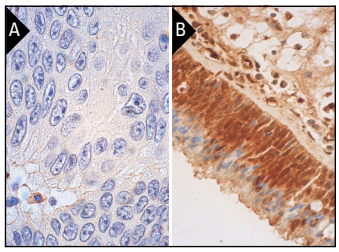
STORAGE

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

DATA



FAS-L (4H9): sc-18897. Western blot analysis of FAS-L expression in K-562 (**A**) and HL-60 (**B**) whole cell lysates immunoprecipitated with FAS-L (4H9): sc-18897 and detected with FAS-L (N-20): sc-834.



FAS-L (N-20): sc-834. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human colon carcinoma tissue at high magnification showing membrane and cytoplasmic localization (**A**). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human colon carcinoma tissue at high magnification showing membrane and cytoplasmic localization (**B**).

SELECT PRODUCT CITATIONS

1. Shiraki, K., et al. 1997. Expression of FAS ligand in liver metastases of human colonic adenocarcinomas. Proc. Natl. Acad. Sci. USA 94: 6420-6425.
2. Ares-Carrasco, S., et al. 2009. Myocardial fibrosis and apoptosis, but not inflammation, are present in long-term experimental diabetes. Am. J. Physiol. Heart Circ. Physiol. 297: 2109-2119.
3. Sayed, D., et al. 2010. MicroRNA-21 is a downstream effector of AKT that mediates its antiapoptotic effects via suppression of Fas ligand. J. Biol. Chem. 285: 20281-20290.
4. Gómez-Sintes, R. and Lucas, J.J. 2010. NFAT/Fas signaling mediates the neuronal apoptosis and motor side effects of GSK-3 inhibition in a mouse model of lithium therapy. J. Clin. Invest. 120: 2432-2445.
5. Duiker, E.W., et al. 2010. The extrinsic apoptosis pathway and its prognostic impact in ovarian cancer. Gynecol. Oncol. 116: 549-555.
6. Sung, W.W., et al. 2011. A polymorphic -844T/C in FasL promoter predicts survival and relapse in non-small cell lung cancer. Clin. Cancer Res. 17: 5991-5999.

RESEARCH USE

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