SANTA CRUZ BIOTECHNOLOGY, INC.

FAS (C236): sc-21730

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 (C236) is a mouse monoclonal antibody raised against the human B lymphoblast cell line SKW6.4.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FAS (C236) is available conjugated to agarose (sc-21730 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-21730 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-21730 PE), fluorescein (sc-21730 FITC), Alexa Fluor® 488 (sc-21730 AF488), Alexa Fluor® 546 (sc-21730 AF546), Alexa Fluor® 594 (sc-21730 AF594) or Alexa Fluor® 647 (sc-21730 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-21730 AF680) or Alexa Fluor® 790 (sc-21730 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

FAS (C236) 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

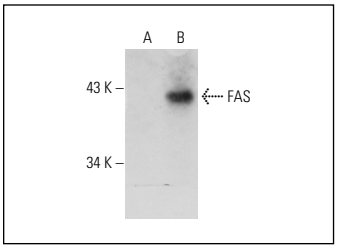
Suitable for use as control antibody for FAS siRNA (h): sc-29311, FAS siRNA (m): sc-29312, FAS siRNA (r): sc-270241, FAS shRNA Plasmid (h): sc-29311-SH, FAS shRNA Plasmid (m): sc-29312-SH, FAS shRNA Plasmid (r): sc-270241-SH, FAS shRNA (h) Lentiviral Particles: sc-29311-V, FAS shRNA (m) Lentiviral Particles: sc-29312-V and FAS shRNA (r) Lentiviral Particles: sc-270241-V.

Molecular Weight of FAS: 48 kDa.

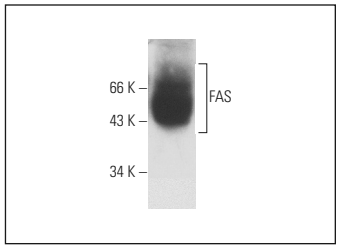
STORAGE

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

DATA



FAS (C236): sc-21730. Western blot analysis of FAS expression in non-transfected: sc-117752 (**A**) and human FAS transfected: sc-113770 (**B**) 293T whole cell lysates.



Western blot analysis of FAS expression in A-431 whole cell lysate immunoprecipitated with FAS (C236): sc-21730 and detected with FAS (B-10): sc-8009.

SELECT PRODUCT CITATIONS

1. Xu, D., et al. 2004. Development of a chimaeric receptor approach to study signalling by tumour necrosis factor receptor family members. Biochem. J. 383: 219-225.
2. Lai, Y.J., et al. 2010. The adaptor protein TRIP6 antagonizes FAS-induced apoptosis but promotes its effect on cell migration. Mol. Cell. Biol. 30: 5582-5596.
3. Zekri, A.R., et al. 2011. Characterization of chronic HCV infection-induced apoptosis. Comp. Hepatol. 10: 4.
4. Cheng, J., et al. 2012. Molecular mechanisms of the biphasic effects of interferon-γ on osteoclastogenesis. J. Interferon Cytokine Res. 32: 34-45.
5. Jules, J., et al. 2015. The IVVY motif and tumor necrosis factor receptor-associated factor (TRAF) sites in the cytoplasmic domain of the receptor activator of nuclear factor κB (RANK) cooperate to induce osteoclastogenesis. J. Biol. Chem. 290: 23738-23750.
6. Chen, Y., et al. 2019. Carbenoxolone ameliorates hepatic lipid metabolism and inflammation in obese mice induced by high fat diet via regulating the JAK2/Stat3 signaling pathway. Int. Immunopharmacol. 74: 105498.
7. Kong, Q., et al. 2019. Penehyclidine hydrochloride exerts protective effects in rats with acute lung injury via the Fas/FasL signaling pathway. Exp. Ther. Med. 17: 3598-3606.
8. Huang, K., et al. 2019. Upregulated microRNA-106a promotes porcine preadipocyte proliferation and differentiation by targeting different genes. Genes 10: 805.
9. Wang, X., et al. 2020. *Stenotrophomonas maltophilia* outer membrane protein A induces epithelial cell apoptosis via mitochondrial pathways. J. Microbiol. 58: 868-877.

RESEARCH USE

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

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