FAS (G-9): sc-74540



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 (G-9) is a mouse monoclonal antibody raised against amino acids 1-335 representing full length FAS of human origin.

PRODUCT

Each vial contains 200 $\mu g \, lg G_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FAS (G-9) is available conjugated to agarose (sc-74540 AC), 500 $\mu g/0.25$ ml agarose in 1 ml, for IP; to HRP (sc-74540 HRP), 200 $\mu g/ml$, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-74540 PE), fluorescein (sc-74540 FITC), Alexa Fluor* 488 (sc-74540 AF488), Alexa Fluor* 546 (sc-74540 AF546), Alexa Fluor* 594 (sc-74540 AF594) or Alexa Fluor* 647 (sc-74540 AF647), 200 $\mu g/ml$, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor* 680 (sc-74540 AF680) or Alexa Fluor* 790 (sc-74540 AF790), 200 $\mu g/ml$, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

FAS (G-9) is recommended for detection of FAS of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 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.

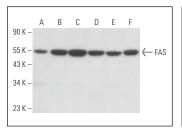
Molecular Weight of FAS: 48 kDa.

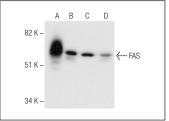
Positive Controls: MDA-MB-231 cell lysate: sc-2232, HuT 78 whole cell lysate: sc-2208 or Jurkat whole cell lysate: sc-2204.

STORAGE

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

DATA





FAS (G-9): sc-74540. Western blot analysis of FAS expression in MDA-MB-231 (A), MCF7 (B), K-562 (C), NIH/3T3 (D), RAW 264.7 (E) and F9 (F) whole cell

FAS (G-9): sc-74540. Western blot analysis of FAS expression in HuT 78 (A), Jurkat (B), MDA-MB-231 (C) and Caki-1 (D) whole cell lysates.

SELECT PRODUCT CITATIONS

- 1. Wu, W., et al. 2010. Up-regulation of FAS reverses cisplatin resistance of human small cell lung cancer cells. J. Exp. Clin. Cancer Res. 29: 49.
- 2. Tafti, S.A., et al. 2011. Maternal undernutrition upregulates apoptosis in offspring nephrogenesis. J. Dev. Orig. Health Dis. 2: 226-235.
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- 6. Li, S., et al. 2017. Inactivated Sendai virus particle upregulates cancer cell expression of intercellular adhesion molecule-1 and enhances natural killer cell sensitivity on cancer cells. Cancer Sci. 108: 2333-2341.
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- 8. Yang, C., et al. 2019. Study of the cytological features of bone marrow mesenchymal stem cells from patients with neuromyelitis optica. Int. J. Mol. Med. 43: 1395-1405.
- 9. Masuda, A., et al. 2020. Efficient recruitment of c-FLIPL to the death-inducing signaling complex leads to FAS resistance in natural killer-cell lymphoma. Cancer Sci. 111: 807-816.
- 10. Zhang, Y.Y., et al. 2021. Modulating oxidative stress counteracts specific antigen-induced regulatory T cell apoptosis in mice. Eur. J. Immunol. 51: 1748-1761.

RESEARCH USE

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