SANTA CRUZ BIOTECHNOLOGY, INC.

FAS (IPO-4): sc-52397

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 (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 ones 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 may be critically involved in CTL-mediated cytotoxicity.

REFERENCES

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4. Drappa, J., Brot, N. and Elkon, K. 1993. The FAS protein is expressed at high levels on $CD4^+$ $CD8^+$ thymocytes and activated mature lymphocytes in normal mice but not in the lupus-prone strain, MRL lpr/lpr. Proc. Natl. Acad. Sci. USA 90: 10340-10344.
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CHROMOSOMAL LOCATION

Genetic locus: FAS (human) mapping to 10q24.1; Fas (mouse) mapping to 19 C1.

SOURCE

FAS (IPO-4) is a mouse monoclonal antibody raised against human tissue/cell preparation.

RESEARCH USE

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

PRODUCT

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

Available as fluorescein conjugate for flow cytometry, sc-52397 FITC, 100 tests.

APPLICATIONS

FAS (IPO-4) is recommended for detection of FAS of mouse, rat and human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

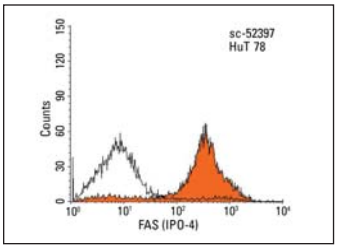
Suitable for use as control antibody for FAS siRNA (h): sc-29311, FAS siRNA (h2): sc-44260 and FAS siRNA (m): sc-29312.

Molecular Weight of FAS: 48 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunofluorescence: use goat anti-mouse IgM-FITC: sc-2082 (dilution range: 1:100-1:400) or goat anti-mouse IgM-TR: sc-2983 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



FAS (IPO-4): sc-52397. Indirect FCM analysis of HuT 78 cells stained with FAS (IPO-4), followed by PE-conjugated goat anti-mouse IgM: sc-3768. Black line histogram represents the isotype control, normal mouse IgM: sc-3881.

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.