SANTA CRUZ BIOTECHNOLOGY, INC.

CD37 (HH1): sc-18881



BACKGROUND

Tetra-spans transmembrane family (TSTF) members (CD9, CD37, CD53, CD63, CD81 and CD82) are cell-surface proteins that are characterized by the presence of four hydrophobic, membrane-spanning domains. TSTF members can mediate signal transduction events influencing the regulation of cell development, adhesion, activation, growth and motility. The human CD37 gene maps to chromosome 19p13.33 and encodes a 281 amino acid protein. CD37 is a cell surface glycoprotein that can complex with integrins and other TSTF proteins and may play a role in T cell-B cell interactions. CD37 is strongly expressed on normal and neoplastic mature slg⁺ B cells and is detected at low levels on resting and activated T cells, neutrophils, granulocytes and monocytes. Transgenic mouse models elicit no changes in development and cellular composition of lymphoid organs where CD37 is lacking.

REFERENCES

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- Maecker, H.T., et al. 1997. The tetraspanin superfamily: molecular facilitators. FASEB J. 11: 428-442.
- Knobeloch, K.P., et al. 2000. Targeted inactivation of the tetraspanin CD37 impairs T-cell-dependent B-cell response under suboptimal costimulatory conditions. Mol. Cell. Biol. 20: 5363-5369.
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- 6. Zhao, X., et al. 2007. Targeting CD37-positive lymphoid malignancies with a novel engineered small modular immunopharmaceutical. Blood 110: 2569-2577.
- Meyer-Wentrup, F., et al. 2007. Dectin-1 interaction with tetraspanin CD37 inhibits IL-6 production. J. Immunol. 178: 154-162.
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CHROMOSOMAL LOCATION

Genetic locus: CD37 (human) mapping to 19p13.33.

SOURCE

CD37 (HH1) is a mouse monoclonal antibody 13540t lymphoma cells from a patient with follicular lymphoma.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 $\mu g\, lgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD37 (HH1) is available conjugated to agarose (sc-18881 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-18881 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-18881 PE), fluorescein (sc-18881 FITC), Alexa Fluor[®] 488 (sc-18881 AF488), Alexa Fluor[®] 546 (sc-18881 AF546), Alexa Fluor[®] 594 (sc-18881 AF594) or Alexa Fluor[®] 647 (sc-18881 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-18881 AF680) or Alexa Fluor[®] 790 (sc-18881 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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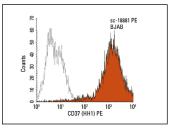
APPLICATIONS

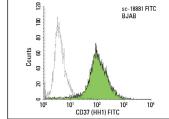
CD37 (HH1) is recommended for detection of CD37 of human origin by flow cytometry (1 μ g per 1 x 10⁶ cells).

Suitable for use as control antibody for CD37 siRNA (h): sc-42784, CD37 shRNA Plasmid (h): sc-42784-SH and CD37 shRNA (h) Lentiviral Particles: sc-42784-V.

Molecular Weight of CD37: 32 kDa.

DATA





CD37 (HH1) PE: sc-18881 PE. FCM analysis of BJAB cells. Black line histogram represents the isotype control, normal mouse IgG₁-PE: sc-2866.

CD37 (HH1) FITC: sc-18881 FITC. FCM analysis of BJAB cells. Black line histogram represents the isotype control, normal mouse IgG₁-FITC: sc-2855.

SELECT PRODUCT CITATIONS

1. Peeters, R., et al. 2022. Fatty acid metabolism in aggressive B-cell lymphoma is inhibited by tetraspanin CD37. Nat. Commun. 13: 5371.

RESEARCH USE

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

PROTOCOLS

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