

CD37 (H-100): sc-98782

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. Trans-genic mouse models elicit no changes in development and cellular composition of lymphoid organs where CD37 is lacking.

REFERENCES

1. Classon, B.J., et al. 1989. The primary structure of the human leukocyte antigen CD37, a species homologue of the rat MRC OX-44 antigen. *J. Exp. Med.* 169: 1497-1502.
2. Okochi, H., et al. 1997. Expression of tetra-spans transmembrane family (CD9, CD37, CD53, CD63, CD81 and CD82) in normal and neoplastic human keratinocytes: an association of CD9 with α 3/ β 1 integrin. *Br. J. Dermatol.* 137: 856-863.
3. Maecker, H.T., et al. 1997. The tetraspanin superfamily: molecular facilitators. *FASEB J.* 11: 428-442.
4. Knobloch, 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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CHROMOSOMAL LOCATION

Genetic locus: CD37 (human) mapping to 19p13.33; Cd37 (mouse) mapping to 7 B4.

SOURCE

CD37 (H-100) is a rabbit polyclonal antibody raised against amino acids 182-281 mapping at the C-terminus of CD37 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

RESEARCH USE

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

APPLICATIONS

CD37 (H-100) is recommended for detection of CD37 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 CD37 siRNA (h): sc-42784, CD37 siRNA (m): sc-44663, CD37 shRNA Plasmid (h): sc-42784-SH, CD37 shRNA Plasmid (m): sc-44663-SH, CD37 shRNA (h) Lentiviral Particles: sc-42784-V and CD37 shRNA (m) Lentiviral Particles: sc-44663-V.

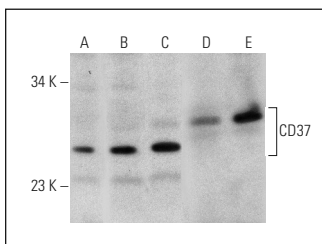
Molecular Weight of CD37: 32 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, CCRF-CEM cell lysate: sc-2225 or HL-60 whole cell lysate: sc-2209.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CD37 (H-100): 98782. Western blot analysis of CD37 expression in Jurkat (A), CCRF-CEM (B) and HL-60 (C) whole cell lysates and mouse lung (D) and rat brain (E) tissue extracts.

PROTOCOLS

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

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Try **CD37 (M-B372): sc-23924**, our highly recommended monoclonal alternative to CD37 (H-100).