CD84 (CD84.1.21): sc-59137



The Power to Question

BACKGROUND

The human CD84 gene maps to chromosome 1q24 and is composed of at least eight exons, with an exon coding for the 5' UTR and the leader peptide, two exons coding for each of the two extracellular lg-like domains, an exon encoding the hydrophobic transmembrane region and four exons coding for the cytoplasmic domains. The extracellular lg-like domains share structural and sequence homology with a group of members of the lg superfamily that include CD2, CD48, CD58 and Ly9. Five CD84 isoforms have been characterized, including CD84a, CD84b, CD84c, CD84d and CD84e, which are preferentially expressed on B lymphocytes, monocytes and platelets, where they act as their own ligand and are therefore costimulatory molecules. The CD84 isoforms are generated by alternative exon enhancement, reading frame shift and use of cryptic splice sites. The differential expression of potential sites of phosphorylation on the different isoforms may be a way to regulate CD84 activity in signal transduction.

REFERENCES

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- Palou, E., Pirotto, F., Sole, J., Freed, J.H., Peral, B., Vilardell, C., Vilella, R., Vives, J. and Gaya, A. 2000. Genomic characterization of CD84 reveals the existence of five isoforms differing in their cytoplasmic domains. Tissue Antigens 55: 118-127.
- 3. Online Mendelian Inheritance in Man, OMIM™. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 604513. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
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CHROMOSOMAL LOCATION

Genetic locus: CD84 (human) mapping to 1q23.3; Cd84 (mouse) mapping to 1 H3.

SOURCE

CD84 (CD84.1.21) is a mouse monoclonal antibody raised against 300.19 cells transfected with CD84 of human origin.

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.

STORAGE

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

APPLICATIONS

CD84 (CD84.1.21) is recommended for detection of CD84 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)] and flow cytometry (1 μ g per 1 x 10⁶ cells).

Suitable for use as control antibody for CD84 siRNA (h): sc-42810, CD84 siRNA (m): sc-42811, CD84 shRNA Plasmid (h): sc-42810-SH, CD84 shRNA Plasmid (m): sc-42811-SH, CD84 shRNA (h) Lentiviral Particles: sc-42810-V and CD84 shRNA (m) Lentiviral Particles: sc-42811-V.

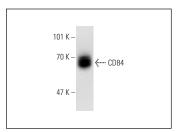
Molecular Weight of CD84: 64-82 kDa.

Positive Controls: Raji whole cell lysate: sc-364236.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



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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.

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