

CD2 (h2): 293T Lysate: sc-172563

BACKGROUND

CD2 (also designated E-rosette receptor) interacts through its amino-terminal domain with the extracellular domain of CD58 (also designated CD2 ligand) to mediate cell adhesion. CD2/CD58 binding can enhance antigen-specific T cell activation. CD2 is a transmembrane glycoprotein that is expressed on peripheral blood T lymphocytes, NK cells and thymocytes, as well as on mouse B cells and rat splenic macrophages. CD58 is a heavily glycosylated protein with a broad tissue distribution in hematopoietic and other cells, including endothelium. Interaction between CD2 and its counterreceptor LFA3 (CD58) on opposing cells optimizes immune system recognition, thereby facilitating communication between helper T lymphocytes and antigen-presenting cells, as well as between cytolytic effectors and target cells.

REFERENCES

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3. Nishizawa, K., et al. 1998. Identification of a proline-binding motif regulating CD2-triggered T lymphocyte activation. *Proc. Natl. Acad. Sci. USA* 95: 14897-14902.
4. Shih, N.Y., et al. 1999. Congenital nephrotic syndrome in mice lacking CD2-associated protein. *Science* 286: 312-315.
5. Guan, F., et al. 2006. Autocrine VEGF-A system in podocytes regulates podocin and its interaction with CD2AP. *Am. J. Physiol. Renal Physiol.* 291: F422-F428.
6. Fan, Q., et al. 2006. The relationship among nephrin, podocin, CD2AP and α -actinin might not be a true "interaction" in podocyte. *Kidney Int.* 69: 1207-1215.
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CHROMOSOMAL LOCATION

Genetic locus: CD2 (human) mapping to 1p13.1.

PRODUCT

CD2 (h2): 293T Lysate represents a lysate of human CD2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

CD2 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive CD2 antibodies. Recommended use: 10-20 μ l per lane.

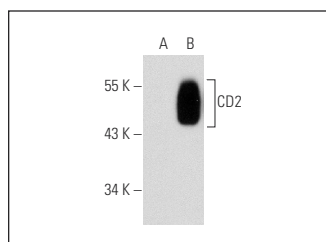
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CD2 (3b6): sc-18907 is recommended as a positive control antibody for Western Blot analysis of enhanced human CD2 expression in CD2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



CD2 (3b6): sc-18907. Western blot analysis of CD2 expression in non-transfected: sc-117752 (A) and human CD2 transfected: sc-172563 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

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.