

CLEC-1 (h): 293T Lysate: sc-114490

BACKGROUND

The human β -glucan protein (Dectin-1) is a small, type II transmembrane receptor that enables β -glucan-dependent, nonopsonic recognition of zymosan and other yeast-derived particles by primary macrophages. Dectin-1 is the human homolog of the C-type (calcium dependent) lectin-like receptor (CLEC) family that play an important role in regulating innate immunity. CLEC-1 is a 280 amino acid single-pass type II transmembrane protein expressed in dendritic and endothelial cells. It accumulates in perinuclear compartments and requires an associated chain to reach the cell surface. CLEC-1 is involved in antigen uptake and is homologous to the natural killer (NK) cell receptors, NKG2s and CD94, that interact with major histocompatibility complex class I molecules and either inhibit or activate cytotoxicity and cytokine secretion. It has a single carbohydrate recognition domain with six conserved and two additional cysteine residues. Additionally, CLEC-1 has a cytoplasmic immunoreceptor tyrosine-based motif and many potential phosphorylation sites.

REFERENCES

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3. Lu, Q., Navdaev, A., Clemetson, J.M. and Clemetson, K.J. 2005. Snake venom C-type lectins interacting with platelet receptors. Structure-function relationships and effects on haemostasis. *Toxicon* 45: 1089-1098.
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5. Rupp, C., Dolznig, H., Puri, C., Sommergruber, W., Kerjaschki, D., Rettig, W.J. and Garin-Chesa, P. 2006. Mouse endosialin, a C-type lectin-like cell surface receptor: expression during embryonic development and induction in experimental cancer neoangiogenesis. *Cancer Immun.* 6: 10.
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CHROMOSOMAL LOCATION

Genetic locus: CLEC1A (human) mapping to 12p13.2.

PRODUCT

CLEC-1 (h): 293T Lysate represents a lysate of human CLEC-1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20 $^{\circ}$ C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

CLEC-1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CLEC-1 antibodies. Recommended use: 10-20 μ l per lane.

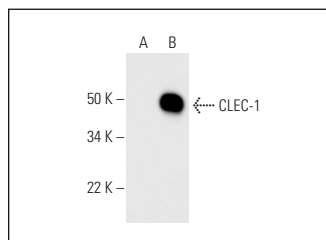
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CLEC-1 (D-6): sc-393134 is recommended as a positive control antibody for Western Blot analysis of enhanced human CLEC-1 expression in CLEC-1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

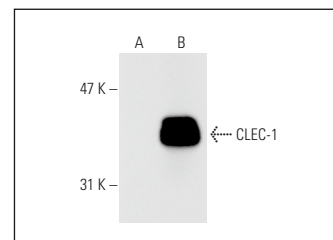
RECOMMENDED SUPPORT REAGENTS

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 MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



CLEC-1 (D-6): sc-393134. Western blot analysis of CLEC-1 expression in non-transfected: sc-117752 (A) and human CLEC-1 transfected: sc-114490 (B) 293T whole cell lysates.



CLEC-1 (55Ex-2): sc-73850. Western blot analysis of CLEC-1 expression in non-transfected: sc-117752 (A) and human CLEC-1 transfected: sc-114490 (B) 293T whole cell lysates.

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.