

# CLEC-1 (55Ex-2): sc-73850

## BACKGROUND

The human  $\beta$ -glucan protein (Dectin-1) is a small, type II transmembrane receptor that enables  $\beta$ -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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## CHROMOSOMAL LOCATION

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

## SOURCE

CLEC-1 (55Ex-2) is a mouse monoclonal antibody raised against the extra-cellular domain of CLEC-1 of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>2b</sub> in 1.0 ml PBS with < 0.1% sodium azide and protein stabilizer.

## APPLICATIONS

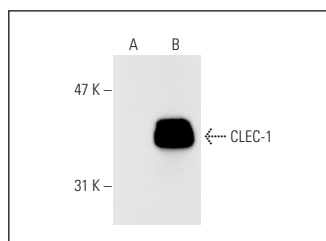
CLEC-1 (55Ex-2) is recommended for detection of CLEC-1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for CLEC-1 siRNA (h): sc-60396, CLEC-1 shRNA Plasmid (h): sc-60396-SH and CLEC-1 shRNA (h) Lentiviral Particles: sc-60396-V.

Molecular Weight of CLEC-1: 32 kDa.

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

## DATA



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.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.