SANTA CRUZ BIOTECHNOLOGY, INC.

DEC-205 (H-250): sc-28816



BACKGROUND

DEC-205 (LY75, lymphocyte antigen 75, GP200-MR6) is a 1,695 residue (mature form) multilectin receptor that belongs to the MMR (macrophage mannose receptor) family of multidomain molecules. MMR family molecules mediate membrane receptor targeting to endosomes or lysosomes rich in major histocompatibility complex class II (MHC II) products. Expressed in mature dendritic cells (DC), DEC-205 contains an extracellular N-terminal cysteine-rich domain, a Fibronectin type II domain, ten C-type carbohydrate recognition domains, a single transmembrane region and a small cytoplasmic C-terminal domain (31 amino acids) containing a tyrosine at 1679. DEC-205 elicits either an agonistic or antagonistic effect on IL-4 function, which is demonstrated by the ability of DEC-205 to imitate IL-4-induced maturation of epithelium or to inhibit IL-4-induced proliferation of T cells, respectively.

REFERENCES

- 1. Tungekar, M.F., et al. 1996. Bladder carcinomas and normal urothelium universally express gp200-MR6, a molecule functionally associated with the interleukin-4 receptor (CD 124). Br. J. Cancer 73: 429-432.
- McKay, P.F., et al. 1998. The gp200-MR6 molecule which is functionally associated with the IL-4 receptor modulates B cell phenotype and is a novel member of the human macrophage mannose receptor family. Eur. J. Immunol. 28: 4071-4083.
- Kato, M., et al. 1998. cDNA cloning of human DEC-205, a putative antigen-uptake receptor on dendritic cells. Immunogenetics 47: 442-450.
- Mahnke, K., et al. 2000. The dendritic cell receptor for endocytosis, DEC-205, can recycle and enhance antigen presentation via major histocompatibility complex class II-positive lysosomal compartments. J. Cell Biol. 151: 673-684.
- Kronin, V., et al. 2000. DEC-205 as a marker of dendritic cells with regulatory effects on CD8 T cell responses. Int. Immunol. 12: 731-735.

CHROMOSOMAL LOCATION

Genetic locus: LY75 (human) mapping to 2q24; Ly75 (mouse) mapping to 2 C1.1.

SOURCE

DEC-205 (H-250) is a rabbit polyclonal antibody raised against amino acids 1473-1722 mapping at the C-terminus of DEC-205 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **D0 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

DEC-205 (H-250) is recommended for detection of precursor and mature forms of DEC-205 and DEC-205/DCL-1 fusion protein 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 DEC-205 siRNA (h): sc-42860, DEC-205 shRNA Plasmid (h): sc-42860-SH and DEC-205 shRNA (h) Lentiviral Particles: sc-42860-V.

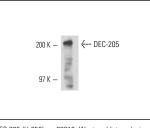
Molecular Weight of DEC-205: 205 kDa.

Positive Controls: mouse lymph node tissue extract.

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



DEC-205 (H-250): sc-28816. Western blot analysis of DEC-205 expression in mouse lymph node whole cell lysate.

SELECT PRODUCT CITATIONS

 Mikulak, J., et al. 2010. DC-specific ICAM-3-grabbing nonintegrin mediates internalization of HIV-1 into human podocytes. Am. J. Physiol. Renal Physiol. 299: F664-F673.

MONOS Satisfation Guaranteed

Try DEC-205 (F-4): sc-515016 or DEC-205 (PN-15): sc-59158, our highly recommended monoclonal alternatives to DEC-205 (H-250).