

DEC-205 (D-18): sc-14602

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 its ability 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.
2. 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.
3. Kato, M., et al. 1998. cDNA cloning of human DEC-205, a putative antigen-uptake receptor on dendritic cells. *Immunogenetics* 47: 442-450.
4. 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.
5. 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 2q24.2; Ly75 (mouse) mapping to 2 C1.1.

SOURCE

DEC-205 (D-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DEC-205 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-14602 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

DEC-205 (D-18) is recommended for detection of DEC-205 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

DEC-205 (D-18) is also recommended for detection of DEC-205 in additional species, including equine, canine, bovine and porcine.

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.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **DEC-205 (F-4): sc-515016** or **DEC-205 (PN-15): sc-59158**, our highly recommended monoclonal alternatives to DEC-205 (D-18).