

CL-P1 (T-20): sc-84794

BACKGROUND

CL-P1 (collectin placenta protein 1), also known as COLEC12 (collectin sub-family member 12), NSR2, SRCL or SCARA4, is a 742 amino acid single-pass type II membrane protein that contains one C-type lectin domain and 3 collagen-like domains. Expressed in kidney, brain, thymus and colon, as well as in perivascular macrophages, CL-P1 is a scavenger receptor that exhibits a variety of functions related with host defense, including promoting the binding and phagocytosis of Gram-positive and Gram-negative bacteria. Additionally, CL-P1 mediates the recognition and degradation of damaged or apoptotic cells and can bind to carbohydrate antigens, thereby facilitating their removal from the host. CL-P1 is thought to play a role in the clearance of β -amyloid plaques from the neural tissue of people affected with Alzheimer's disease (AD), suggesting that CL-P1 may be involved in reducing the progression of AD.

REFERENCES

1. Nakamura, K., et al. 2001. Molecular cloning and functional characterization of a human scavenger receptor with C-type lectin (SRCL), a novel member of a scavenger receptor family. *Biochem. Biophys. Res. Commun.* 280: 1028-1035.
2. Ohtani, K., et al. 2001. The membrane-type collectin CL-P1 is a scavenger receptor on vascular endothelial cells. *J. Biol. Chem.* 276: 44222-44228.
3. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607621. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Yoshida, T., et al. 2003. SRCL/CL-P1 recognizes GalNAc and a carcinoma-associated antigen, Tn antigen. *J. Biochem.* 133: 271-277.
5. Ohmori, H., et al. 2003. Haplotype analysis of the human collectin placenta 1 (hCL-P1) gene. *J. Hum. Genet.* 48: 82-85.
6. Coombs, P.J., et al. 2005. Selective binding of the scavenger receptor C-type lectin to Lewis^x trisaccharide and related glycan ligands. *J. Biol. Chem.* 280: 22993-22999.
7. Nakamura, K., et al. 2006. Possible role of scavenger receptor SRCL in the clearance of amyloid- β in Alzheimer's disease. *J. Neurosci. Res.* 84: 874-890.

CHROMOSOMAL LOCATION

Genetic locus: COLEC12 (human) mapping to 18p11.32; Colec12 (mouse) mapping to 18 A1.

SOURCE

CL-P1 (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CL-P1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-84794 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CL-P1 (T-20) is recommended for detection of CL-P1 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 CL-P1 siRNA (h): sc-72913, CL-P1 siRNA (m): sc-142359, CL-P1 shRNA Plasmid (h): sc-72913-SH, CL-P1 shRNA Plasmid (m): sc-142359-SH, CL-P1 shRNA (h) Lentiviral Particles: sc-72913-V and CL-P1 shRNA (m) Lentiviral Particles: sc-142359-V.

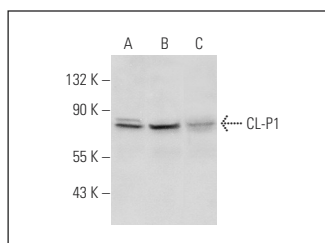
Molecular Weight of CL-P1: 82 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, A549 cell lysate: sc-2413 or K-562 whole cell lysate: sc-2203.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



CL-P1 (T-20): sc-84794. Western blot analysis of CL-P1 expression in A549 (A), Jurkat (B) and K-562 (C) 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 or our catalog for detailed protocols and support products.