

# CL-P1 (A-22): sc-133462

## 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 three 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  $\beta$ -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

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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<sup>™</sup>. 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<sup>x</sup> 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- $\beta$  in Alzheimer's disease. *J. Neurosci. Res.* 84: 874-890.
8. Selman, L., et al. 2008. Expression and tissue localization of collectin placenta 1 (CL-P1, SRCL) in human tissues. *Mol. Immunol.* 45: 3278-3288.
9. Liang, M., et al. 2008. Molecular networks in Dahl salt-sensitive hypertension based on transcriptome analysis of a panel of consomic rats. *Physiol. Genomics* 34: 54-64.

## STORAGE

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

## PROTOCOLS

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

## CHROMOSOMAL LOCATION

Genetic locus: COLEC12 (human) mapping to 18p11.32.

## SOURCE

CL-P1 (A-22) is an affinity purified rabbit polyclonal antibody raised against synthetic CL-P1 peptide of human origin.

## PRODUCT

Each vial contains 50  $\mu$ g IgG in 500  $\mu$ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

CL-P1 (A-22) is recommended for detection of CL-P1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] 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 shRNA Plasmid (h): sc-72913-SH and CL-P1 shRNA (h) Lentiviral Particles: sc-72913-V.

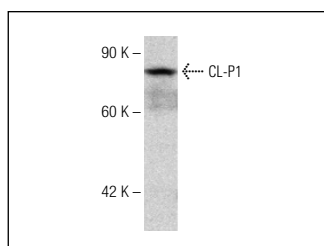
Molecular Weight of CL-P1: 82 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

## 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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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).

## DATA



CL-P1 (A-22): sc-133462. Western blot analysis of CL-P1 expression in Jurkat whole cell lysate.

## RESEARCH USE

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