Monoclonal Anti-human CL-P1/COLEC12 Antibody

ORDERING INFORMATION

Catalog Number: MAB2690

Clone: 388306

Lot Number:YSO01

Size: 100 μg

Formulation: 0.2 μm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human CL-P1

Immunogen: NS0-derived rhCL-P1

Ig class: rat IgG_1

Recommended Application:
Flow Cytometry

Other Application:
Western blot

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a rat immunized with purified, NS0-derived, recombinant human Collectin Placenta 1 isoform 1 (rhCL-P1; aa 57 - 742: Accession # NP_569057). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. CL-P1, also known as Scavenger Receptor C-type Lectin and collectin sub-family member 12, is a type II transmembrane C-type lectin that is expressed on vascular endothelial cells. The coiled-coil and collagen-like domains mediate CL-P1 homotrimerization. CL-P1 functions as a receptor for desialated glycoproteins and bacterial molecular patterns. Two alternately spliced forms of human CL-P1 exist, one of which has 70 amino acids deleted from the carbohydrate recognition domain. Within the extracellular region, human CL-P1 shares at least 92% amino acid identity with bovine, canine, mouse, and rat CL-P1.

Formulation

Lyophilized from a 0.2 μm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 μg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody was selected for its ability to detect human CL-P1 in direct ELISAs and Western blots. In Western blots, this antibody shows no cross-reactivity with rmCL-P1.

Applications

Flow Cytometry- This antibody was validated for flow cytometry using HUVECs cells. Dilute this antibody to 25 μg/mL and add 10 μL of the diluted solution to 1 - 2.5 x 10^5 cells in a total reaction volume not exceeding 200 μL. The binding of unlabeled monoclonal antibodies may be visualized by adding 10 μL of a 25 μg/mL stock solution of a secondary developing reagent such as goat anti-rat IgG conjugated to a fluorochrome.

Western Blot - This antibody can be used at 1 - 2 μg/mL with the appropriate secondary reagents to detect human CL-P1. Using a colorimetric detection system, the detection limit for rhCL-P1 is approximately 25 ng/lane under non-reducing conditions. Use of this antibody under reducing conditions is not recommended. Chemiluminescent detection with WesternGlo Chemiluminescent Detection Substrate (R&D Systems Catalog # AR004) will increase sensitivity by 5 to 50 fold.

In this application, the use of anti-human CL-P1 monoclonal antibody, R&D Systems Catalog # MAB26901 is recommended.

Optimal dilutions should be determined by each laboratory for each application.

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