

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CL-P1/COLEC12 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CL-P1/COLEC12 Ala101-Leu742 Accession # Q8K4Q8
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Blockade of Receptor-ligand Interaction	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Collectins are a family of Ca^{++} -dependent, C-type lectins that contain a collagenous domain and function as recognition molecules for molecular patterns found on pathogens (1-4). Collectin placenta 1 (CL-P1), also known as collectin sub-family member 12 and scavenger receptor with C-type lectin type I (SRCL), is a 140 kDa member of the collectin family of glycoproteins. With two exceptions, all collectins are secreted. CL-P1 is the only collectin known to be membrane bound, while CL-L1 (collectin liver-1) is the only known cytoplasmic collectin (1). Mouse CL-P1 is synthesized as a 742 amino acid (aa) type II transmembrane glycoprotein that includes an N-terminal 39 aa cytoplasmic domain, an 18 aa transmembrane segment, and a 685 aa C-terminal extracellular domain. The short cytoplasmic domain contains an internalization motif (Y-K-R-F), while the ECD is complex, demonstrating a coiled-coil segment, a Ser-Thr rich region, a collagen-like structure, and a C-type lectin/carbohydrate recognition domain (CRD) (5, 6). Unlike human CL-P1, no splice variants of mouse CL-P1 have been described (5, 7). Trimerization of CL-P1 is mediated by its collagen-like and coiled-coil helical domains (1, 6). Within the ECD, mouse CL-P1 shares 88%, 89%, 92%, and 98% aa sequence identity with bovine, canine, human, and rat CL-P1, respectively. The CRD shares 23-27% aa sequence identity with the CRD of collectins CL-L1, collectin sub-family member 11, MBL, SP-A1, and SP-D. Notably, this CRD recognizes galactose and fucose within the context of asialo-orosomucoids associated with the Lewis^x epitope (8, 9). CL-P1 is expressed in vascular endothelial cells and may play a role in bacterial recognition or as a scavenger receptor for desialylated glycoproteins (6, 8).

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