Mouse CL-P1/COLEC12 Biotinylated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: BAF3130

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CL-P1/COLEC12 in 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
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse CL-P1/COLEC12 (Catalog # 3130-CL)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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).

References:

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