

**DESCRIPTION**

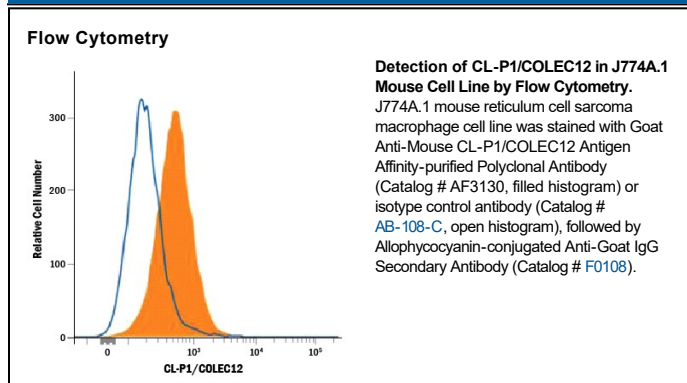
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse CL-P1/COLEC12 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse CL-P1/COLEC12 Ala101-Leu742 Accession # Q8K4Q8
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Mouse CL-P1/COLEC12 (Catalog # 3130-CL)
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
<b>Blockade of Receptor-ligand Interaction</b>	In a functional ELISA, 1-4 µg/mL of this antibody will block 50% of the binding of 100 ng/mL of biotinylated AGE-BSA to immobilized Recombinant Mouse CL-P1/COLEC12 (Catalog # 3130-CL) coated at 5 µg/mL (100 µL/well). At 100 µg/mL, this antibody will block >90% of the binding.	

**DATA**



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

Collectins are a family of Ca<sup>++</sup>-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<sup>x</sup> 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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