

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CL-P1/COLEC12 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant mouse CL-P1 is observed.
Source	Monoclonal Rat IgG ₁ Clone # 388305
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CL-P1/COLEC12 isoform 1 Leu57-Leu742 Accession # Q5KU26
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.

Western Blot 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). Human collectin placenta 1 (CL-P1; also known as collectin sub-family member 12 and SRCL type I [scavenger receptor with C-type lectin type II]) is a 110 kDa member of the collectin family of glycoproteins (5, 6). 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). Human CL-P1 is synthesized as a 742 amino acid (aa) type II transmembrane glycoprotein that contains an N-terminal 39 aa cytoplasmic domain, a 17 aa transmembrane segment, and a 686 aa C-terminal extracellular region (6). The short cytoplasmic domain contains an internalization motif (Y-K-R-F) while the extracellular region 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). Notably, this CRD recognizes galactose (and fucose) within the context of asialo-orosomucoids associated with the Lewis^x epitope (7, 8). CL-P1 has a 300 kDa trimeric form due to its collagen-like and coiled-coil helical domains (1, 5). There is a 97 kDa, alternate splice form of CL-P1 (SRCL type II) that shows a 120 aa truncation at the C-terminus. This effectively removes the entire CRD found on full-length CL-P1 (6). Human CL-P1 shares 93% aa sequence identity with mouse CL-P1 over the entire extracellular region, and 87% aa identity within each species CRD (5, 9). Human CL-P1 is expressed in vascular endothelial cells (5). CL-P1 may play a role in bacterial recognition or as a scavenger receptor for desialylated glycoproteins.

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