

## Anti-Collectin-11 / CL-K1 antibody, mouse monoclonal (821)

72-040 100 µg

**Shipping and Storage:** Ship at 4°C or -20°C and store at -20°C. Do not freeze

**Immunogen:** Recombinant human collectin-11 (amino acids 107 to 271) corresponding to the carbohydrate recognition domain (CRD) expressed in *Escherichia coli*.

**Form:** 0.5 mg/ml in PBS<sup>-</sup> with 50% glycerol, filter sterilized.

**Purity:** IgG, affinity-purified with Protein A

**Isotype:** mouse IgG1

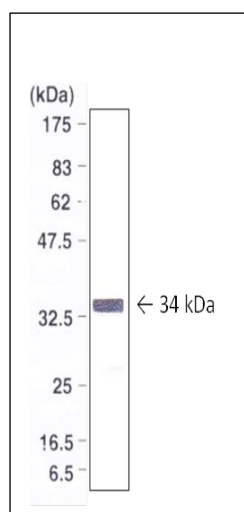
**Reactivity:** Reacts with human, mouse, rat and Chinese hamster

### Applications:

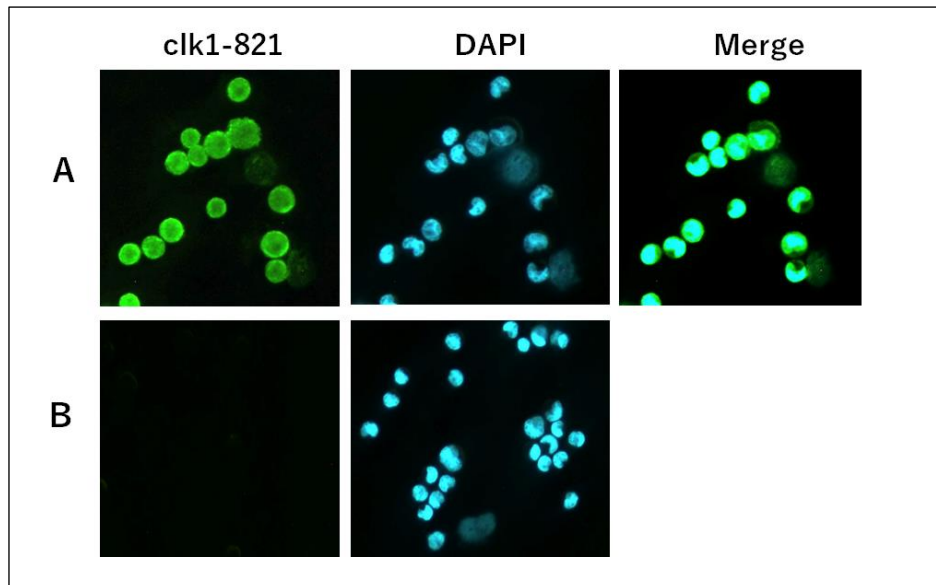
1. Western blot (1/500~1/1,000)
2. Immunofluorescent staining (1/500)
3. ELISA (assay dependent)

**Background:** Collectins are characterized by a collagen-like sequence and a carbohydrate recognition domain (CRD) and are members of the vertebrate C-type lectin superfamily. Collectins play an important role in the innate immune system. Collectin-11 (CL-K1) is a secreted-type protein and detected in human serum and the Golgi of almost all organs. At least 10 isoforms produced by alternative splicing are known. Isoform 1 of Collectin-11 has an open reading frame of 813 base pairs encoding 271 amino acids. It has a signal peptide consisting of 25 amino acids at N-terminal. CL-K1 in supernatant of CL-K1-cDNA-transfected CHO cells shows an apparent molecular mass of 34 kDa

**Data Link:** UniProtKB:[Q9BWP8](https://www.uniprot.org/entry/Q9BWP8) (COL11\_HUMAN) :GenBank accession number : 78989, AB119525, AB119650, AB119651 and AB119652.



**Fig.1. Identification of Collectin-11 protein by Western blotting**  
Supernatant of CHO cells expressing human recombinant Collectin-11 (1 µg/ml) was separated on SDS-PAGE. The monoclonal antibody was used at 1/500 dilution. The collectin protein migrates at 34 kDa position



**Fig.2. Detection of collectin-11 protein transfected in CHO cells by immunofluorescence staining**

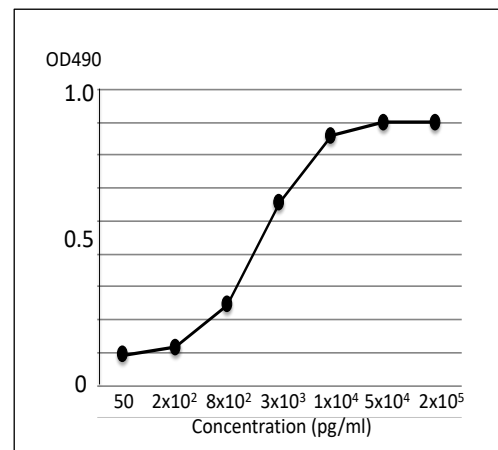
A: CHO cells expressing human recombinant Collectin-11.

B: CHO cells (mock infected cells).

The antibody was used at 1/500 dilution. The FITC-conjugate rabbit anti-mouse IgG (x4000) was added. Nucleus (DNA) was stained with DAPI.

**Fig.3 Titration of recombinant CL-K1 protein transfected in CHO cells by indirect ELISA using monoclonal antibody.**

The indicated amounts of recombinant Collectin-11 protein expressed in CHO cells were coated onto the wells of the ELISA plate. After blocking with 5% skim milk, monoclonal antibody at the 1/1000 dilution was added to the each well. HRP-conjugated goat anti-mouse IgG (100 $\mu$ l, x4000 dilution) was added. As substrate, orthophenylenediamine was used. Optical density (OD) measured at 490nm.



**References:** This antibody was used and cited in the following publication.

Yoshizaki T et al. Comparison of human blood concentrations of collectin kidney 1 and mannan-binding lectin. [J Biochem](#). 2012 Jan;151(1):57-64. PMID: [21893516](#). **WB (human)**

**Related product:** 72-041 Anti-collectin placenta 1 (CL-P1), mouse monoclonal (53)