

CD21
Catalog # PVGS1913**Specification**

CD21 - Product Information

Primary Accession [P19070](#)
Species
Mouse

Sequence
Ile12-Trp963

Purity
> 90% as determined by Bis-Tris PAGE

Endotoxin Level
Less than 1EU per µg by the LAL method.

Expression System
HEK293

Theoretical Molecular Weight
106.03 kDa

Formulation **Lyophilized from a 0.22 µm filtered solution in PBS, (pH 7.4).**

Reconstitution
Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.

Storage & Stability
Upon receiving, the product remains stable up to 6 months at -20 °C or below. Upon reconstitution, the product should be stable for 3 months at -80 °C. Avoid repeated freeze-thaw cycles. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

CD21 - Additional Information

Other Names
Complement receptor type 2, Cr2, Complement C3d receptor, CD21, Cr2

Target Background
A natural soluble form of CD21 that is cleaved from lymphocyte membrane CD21 circulates in normal human serum. Soluble CD21 retains the capacity to bind iC3b and CD23, the known ligands of membrane CD21. In a similar fashion to IgE complexes, another ligand of CD23, the soluble CD21 was shown to efficiently trigger CD23-signalling pathways in human monocytes.

CD21 - Protein Information

Name Cr2**Function**

Serves as a receptor for various ligands including complement component CD3d, HNRNPU OR IFNA1. When C3d is bound to antigens, attaches to C3d on B-cell surface and thereby facilitates the recognition and uptake of antigens by B-cells. This interaction enhances B-cell activation and subsequent immune responses. Forms a complex with several partners on the surface of B-cells including CD19, FCRL5 and CD81, to form the B-cell coreceptor complex that plays a crucial role in B-cell activation and signaling. Also induces specific intracellular signaling separately from the BCR and CD19 by activating the tyrosine kinase SRC, which then phosphorylates nucleolin/NCL and triggers AKT and GSK3 kinase activities in a SYK/CD19-independent manner. Acts as a ligand for CD23 (FcepsilonRII), a low-affinity receptor for IgE, which is expressed on B-cells and other immune cells, and thus participates in the regulation of IgE production.

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P20023}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P20023}

Tissue Location

B-lymphocytes.

CD21 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD21 - Images