

CD21

Catalog # PVGS1913

Product Information

Primary Accession Species	P19070 Mouse
Sequence	Ile12-Trp963
Purity	> 90% as determined by Bis-Tris PAGE
Endotoxin Level	Less than 1EU per μ g by the LAL method.
Expression System	HEK293
Theoretical Molecular Weight	106.03 kDa
Formulation Reconstitution	Lyophilized from a 0.22 μ m filtered solution in PBS, (pH 7.4). Centrifuge the tube before opening. Reconstituting to a concentration more than 100 μ g/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.

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.

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 (FcεpsilonRII), 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.