For Research Use Only

CD21 Recombinant monoclonal antibody, PBS Only (Detector)

Catalog Number:87097-1-PBS



Purification Method:

Protein A purification

CloneNo.:

252181F1

Basic Information

Catalog Number: GenBank Accession Number: 87097-1-PBS NM_001877.5

Source: GeneID (NCBI): Rabbit 1380

Isotype:ENSEMBL Gene ID:IgGENSG00000117322Immunogen Catalog Number:UNIPROT ID:EG2980P20023-1

Full Name:

complement component (3d/Epstein Barr virus) receptor 2

Calculated MW: 113 kDa Observed MW: 150 kDa

Applications

Tested Applications:

WB, Sandwich ELISA, Indirect ELISA

Species Specificity:

human

Background Information

CD21, also known as complement receptor type 2 (CR2), complement C3d receptor, and Epstein-Barr virus receptor, is a transmembrane protein that contains a small cytoplasmic domain, a transmembrane region and an extracellular domain consisting of 15 tandem short consensus repeat sequences (PMID: 6230668; 2551147). It is expressed on B cells, follicular dendritic cells, thymocytes and a subset of peripheral T cells (PMID: 26119182). CD21 binds complement fragments C3d, C3dg and iC3b and acts as a receptor for the Epstein-Barr virus (PMID: 7753047). On B cells, together with CD19 and CD81, CD21 forms a complex that functions as a co-receptor to the BCR (PMID: 7542009). It is involved in B cells activation and functions.

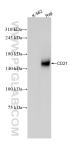
Storage

Storage: Store at -80°C.

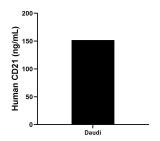
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS only, pH7.3

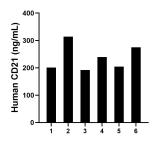
Selected Validation Data



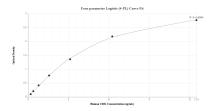
Raji cells were subjected to SDS PAGE followed by western blot with 87097-1-RR (CR2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 87097-1-PBS in a different storage buffer formulation.



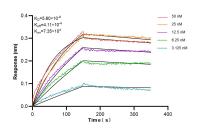
The mean CD21 concentration was determined to be 152.00 ng/mL in Daudi cell extract based on a 1.8 mg/mL extract load.



Plasma of six individual healthy human donors was measured. The human CD21 concentration of detected samples was determined to be 7.29 ng/mL with a range of 3.90 - 9.46 ng/mL



Sandwich ELISA standard curve of MP02864-2, Human CD21 Recombinant Matched Antibody Pair -PBS only. 87097-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg2980. 87097-1-PBS was HRP conjugated as the detection antibody. Range: 0.195-12.5 ng/mL



Biolayer interferometry (BLI) kinetic assays of 87097-1-RR against Human CD21 were performed. The affinity constant is 5.60 nM.