

**CD19**  
Catalog # PVGS1934**Specification**

---

**CD19 - Product Information**

Primary Accession [P25918](#)  
**Species**  
Mouse

**Sequence**  
Arg19-Gly287

**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**  
30.7 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.

**CD19 - Additional Information**

**Gene ID** 12478

**Other Names**  
B-lymphocyte antigen CD19, Differentiation antigen CD19, CD19, Cd19

**Target Background**  
CD19 is a 95 kDa transmembrane glycoprotein that plays a central role in B cell activation and humoral immune responses. Functions as coreceptor for the B-cell antigen receptor complex (BCR) on B-lymphocytes. Decreases the threshold for activation of downstream signaling pathways and for triggering B-cell responses to antigens. Activates signaling pathways that lead to the activation of phosphatidylinositol 3-kinase and the mobilization of intracellular Ca<sup>2</sup> stores.

## CD19 - Protein Information

**Name** Cd19

### Function

Functions as a coreceptor for the B-cell antigen receptor complex (BCR) on B-lymphocytes. Decreases the threshold for activation of downstream signaling pathways and for triggering B-cell responses to antigens (By similarity). Activates signaling pathways that lead to the activation of phosphatidylinositol 3-kinase and the mobilization of intracellular Ca(2+) stores (PubMed:<a href="http://www.uniprot.org/citations/12387743" target="\_blank">12387743</a>, PubMed:<a href="http://www.uniprot.org/citations/20101619" target="\_blank">20101619</a>, PubMed:<a href="http://www.uniprot.org/citations/9382888" target="\_blank">9382888</a>). Is not required for early steps during B cell differentiation in the blood marrow (PubMed:<a href="http://www.uniprot.org/citations/7542548" target="\_blank">7542548</a>, PubMed:<a href="http://www.uniprot.org/citations/7543183" target="\_blank">7543183</a>, PubMed:<a href="http://www.uniprot.org/citations/9317126" target="\_blank">9317126</a>). Required for normal differentiation of B-1 cells (PubMed:<a href="http://www.uniprot.org/citations/12387743" target="\_blank">12387743</a>, PubMed:<a href="http://www.uniprot.org/citations/7542548" target="\_blank">7542548</a>, PubMed:<a href="http://www.uniprot.org/citations/7543183" target="\_blank">7543183</a>). Required for normal B cell differentiation and proliferation in response to antigen challenges (PubMed:<a href="http://www.uniprot.org/citations/12387743" target="\_blank">12387743</a>, PubMed:<a href="http://www.uniprot.org/citations/7542548" target="\_blank">7542548</a>, PubMed:<a href="http://www.uniprot.org/citations/9317126" target="\_blank">9317126</a>). Required for normal levels of serum immunoglobulins, and for production of high- affinity antibodies in response to antigen challenge (PubMed:<a href="http://www.uniprot.org/citations/12387743" target="\_blank">12387743</a>, PubMed:<a href="http://www.uniprot.org/citations/7542548" target="\_blank">7542548</a>, PubMed:<a href="http://www.uniprot.org/citations/7543183" target="\_blank">7543183</a>).

### Cellular Location

Cell membrane; Single-pass type I membrane protein. Membrane raft; Single-pass type I membrane protein

### Tissue Location

Detected on B cells in spleen, bone marrow, thymus and lymph nodes (PubMed:12387743, PubMed:20101619, PubMed:7542548) Detected on peripheral blood lymphocytes (at protein level) (PubMed:7543183).

## CD19 - 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](#)

## CD19 - Images