

CD19

Catalog # PVGS1934

Product Information

Primary Accession Species	P25918 Mouse
Sequence	Arg19-Gly287
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	30.7 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.

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 ²⁺ stores.

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:[12387743](#), PubMed:[20101619](#), PubMed:[9382888](#)). Is not required for early steps during B cell differentiation in the blood marrow (PubMed:[7542548](#), PubMed:[7543183](#), PubMed:[9317126](#)). Required for normal differentiation of B-1 cells (PubMed:[12387743](#), PubMed:[7542548](#), PubMed:[7543183](#)). Required for normal B cell differentiation and proliferation in response to antigen challenges (PubMed:[12387743](#), PubMed:[7542548](#), PubMed:[9317126](#)). Required for normal levels of serum immunoglobulins, and for production of high- affinity antibodies in response to antigen challenge (PubMed:[12387743](#), PubMed:[7542548](#), PubMed:[7543183](#)).

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](#)).

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