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CD19

Catalog # PVGS1539

Product Information

Primary Accession	P15391
Species	Human
Sequence	Pro20-Lys291
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	
Expression System	CHO
Formulation	Lyophilized from a 0.2 □m filtered solution in PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O or PBS up to 100 □g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Additional Information

Gene ID	930
Other Names	B-lymphocyte antigen CD19, B-lymphocyte surface antigen B4, Differentiation antigen CD19, T-cell surface antigen Leu-12, CD19, CD19
Target Background	CD19 is a 95 kDa coreceptor, which amplifies the signaling cascade in B cells. On the B cell surface, CD19 associates with CD21, CD81 and Leu-13 to exert its function. The cytoplasmic tail of CD19 has nine conserved tyrosine residues playing critical roles in CD19 mediated function by coupling signaling molecules to the receptor. Mature human CD19 consists of a 272aa extracellular domain (ECD) with two Ig-like domains, a 22aa transmembrane segment, and a 243aa cytoplasmic domain.

Protein Information

Name	CD19
Function	Functions as a coreceptor for the B-cell antigen receptor complex (BCR) on B-lymphocytes (PubMed:29523808). Decreases the threshold for activation of

	downstream signaling pathways and for triggering B-cell responses to antigens (PubMed:1373518, PubMed:16672701, PubMed:2463100). Activates signaling pathways that lead to the activation of phosphatidylinositol 3-kinase and the mobilization of intracellular Ca(2+) stores (PubMed:12387743, PubMed:16672701, PubMed:9317126, PubMed:9382888). Is not required for early steps during B cell differentiation in the blood marrow (PubMed:9317126). Required for normal differentiation of B-1 cells (By similarity). Required for normal B cell differentiation and proliferation in response to antigen challenges (PubMed:1373518, PubMed:2463100). Required for normal levels of serum immunoglobulins, and for production of high-affinity antibodies in response to antigen challenge (PubMed:12387743, PubMed:16672701, PubMed:9317126).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Membrane raft {ECO:0000250|UniProtKB:P25918}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P25918}
Tissue Location	Detected on marginal zone and germinal center B cells in lymph nodes (PubMed:2463100). Detected on blood B cells (at protein level) (PubMed:16672701, PubMed:2463100)

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