

Product datasheet for TP302922

CD19 (NM_001770) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human CD19 molecule (CD19)
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC202922 protein sequence Red =Cloning site Green =Tags(s)

MPPPRLLFFLLFLTPMEVRPEEPLVVKVEEGDNAVLQCLKGTS DGPTQQLTWSRESPLKPFLKLSLGLPG
LGIHMRPLAIWLFIFNVSQQMGGFYLCQPGPPSEKAWQPGWTVNVEGSGELFRWNVSDLGGLGCGLKNRS
SEGPSSPSGKLMSPKLYVWAKDRPEIWE GEPCLPPRDSL NQSL SQDLTMAPGSTLWLS CGVPPDSVSRG
PLSWTHVHPKGP KLSLSLELKDDRPARDMWV METG LLLPRATAQDAGKY YCHRG NLTMSFHLEITARPV L
WHWLLRTGGWKVSAVTLAYLIFCLCSLVGILHLQRALVLRKRKRMTDPTRRFFKVTPPPGSGPQNQYGN
VLSLPTPTSGLGRAQRWAAGLGGTAPSYGNPSSDVQADGALGSRSPPGVGP EEEEEGEGYEPDSEEDSEF
YENDSNLGQDQLSQDGS GYENPEDEPLGPEDEDSFSNAESYENEDEELTQP VARTMDFLSPHGS AWDP SR
EATSLGSQSYEDMRGILYAAPQLRSIRGQPGPNHEEDADS YENMDNPDGDP AWWGGGGRMGTWSTR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	60.9 kDa
Concentration:	>50 ug/mL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u>NP_001761</u>
Locus ID:	930



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UniProt ID: [P15391](#)

RefSeq Size: 1965

Cytogenetics: 16p11.2

RefSeq ORF: 1668

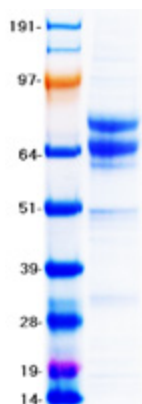
Synonyms: B4; CVID3

Summary: This gene encodes a member of the immunoglobulin gene superfamily. Expression of this cell surface protein is restricted to B cell lymphocytes. This protein is a reliable marker for pre-B cells but its expression diminishes during terminal B cell differentiation in antibody secreting plasma cells. The protein has two N-terminal extracellular Ig-like domains separated by a non-Ig-like domain, a hydrophobic transmembrane domain, and a large C-terminal cytoplasmic domain. This protein forms a complex with several membrane proteins including complement receptor type 2 (CD21) and tetraspanin (CD81) and this complex reduces the threshold for antigen-initiated B cell activation. Activation of this B-cell antigen receptor complex activates the phosphatidylinositol 3-kinase signalling pathway and the subsequent release of intracellular stores of calcium ions. This protein is a target of chimeric antigen receptor (CAR) T-cells used in the treatment of lymphoblastic leukemia. Mutations in this gene are associated with the disease common variable immunodeficiency 3 (CVID3) which results in a failure of B-cell differentiation and impaired secretion of immunoglobulins. CVID3 is characterized by hypogammaglobulinemia, an inability to mount an antibody response to antigen, and recurrent bacterial infections. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2020]

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: B cell receptor signaling pathway, Hematopoietic cell lineage, Primary immunodeficiency

Product images:



Coomassie blue staining of purified CD19 protein (Cat# TP302922). The protein was produced from HEK293T cells transfected with CD19 cDNA clone (Cat# [RC202922]) using MegaTran 2.0 (Cat# [TT210002]).