

Product datasheet for TP302922

OriGene Technologies, Inc.

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CD19 (NM_001770) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human CD19 molecule (CD19), 20 μg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC202922 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MPPPRLLFFLLFLTPMEVRPEEPLVVKVEEGDNAVLQCLKGTSDGPTQQLTWSRESPLKPFLKLSLGLPG LGIHMRPLAIWLFIFNVSQQMGGFYLCQPGPPSEKAWQPGWTVNVEGSGELFRWNVSDLGGLGCGLKN

RS

SEGPSSPSGKLMSPKLYVWAKDRPEIWEGEPPCLPPRDSLNQSLSQDLTMAPGSTLWLSCGVPPDSVSRG PLSWTHVHPKGPKSLLSLELKDDRPARDMWVMETGLLLPRATAQDAGKYYCHRGNLTMSFHLEITARPV

L

WHWLLRTGGWKVSAVTLAYLIFCLCSLVGILHLQRALVLRRKRKRMTDPTRRFFKVTPPPGSGPQNQYGN VLSLPTPTSGLGRAQRWAAGLGGTAPSYGNPSSDVQADGALGSRSPPGVGPEEEEGEGYEEPDSEEDSEF YENDSNLGQDQLSQDGSGYENPEDEPLGPEDEDSFSNAESYENEDEELTQPVARTMDFLSPHGSAWDPS

R

EATSLGSQSYEDMRGILYAAPQLRSIRGQPGPNHEEDADSYENMDNPDGPDPAWGGGGRMGTWSTR

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-Myc/DDK

Predicted MW: 60.9 kDa

Concentration: >0.1 μg/μL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.





CD19 (NM_001770) Human Recombinant Protein - TP302922

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: NP 001761

Locus ID: 930

 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

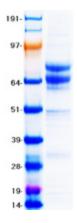
variants encoding distinct isoforms. [provided by RefSeq, Jul 2020]

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]).