

Catalog # PBV11489r

Human CellExp<sup>™</sup> CD19, Human recombinant CD19, B4, CVID3, MGC12802

## Specification

## Human CellExp<sup>™</sup> CD19, Human recombinant - Product info

Primary Accession Calculated MW

<u>AAH06338</u>

This protein is fused with a 6× His tag at N-terminus and has a calculated MW of 31.6 kDa. KDa

## Human CellExp<sup>™</sup> CD19, Human recombinant - Additional Info

Other Names CD19, B4, CVID3, MGC12802

Gene Source Source Assay&Purity Assay2&Purity2 Recombinant Target/Specificity CD19 Human HEK 293 cells SDS-PAGE;>95% N/A;>95% Yes

**Application Notes** Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 μg/ml

Format Lyophilized

Storage -20°C;Lyophilized

## Human CellExp<sup>™</sup> CD19, Human recombinant - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Human CellExp<sup>™</sup> CD19, Human recombinant - Images

Human CellExp<sup>™</sup> CD19, Human recombinant - Background



B-lymphocyte antigen CD19 is also known as CD19 (Cluster of Differentiation 19), is a single-pass type I membrane protein which contains two Ig-like C2-type (immunoglobulin-like) domains. CD19 is expressed on follicular dendritic cells and B cells. In fact, it is present on B cells from earliest recognizable B-lineage cells during development to B-cell blasts but is lost on maturation to plasma cells. It primarily acts as a B cell co-receptor in conjunction with CD21 and CD81. Upon activation, the cytoplasmic tail of CD19 becomes phosphorylated, which leads to binding by Src-family kinases and recruitment of PI-3 kinase. As on T cells, several surface molecules form the antigen receptor and form a complex on B lymphocytes. The (almost) B cell-specific CD19 phosphoglycoprotein is one of these molecules. The others are CD21 and CD81. These surface immunoglobulin (slg)-associated molecules facilitate signal transduction. On living B cells, anti-immunoglobulin antibody mimicking exogenous antigen causes CD19 to bind to slg and internalize with it. The reverse process has not been demonstrated, suggesting that formation of this receptor complex is antigen-induced. This molecular association has been confirmed by chemical studies. Mutations in CD19 are associated with severe immunodeficiency syndromes characterized by diminished antibody production. CD19 has been shown to interact with: CD81, CD82, Complement receptor 2, and VAV2.