BioVision 03/16 For research use only

## Human CellExp™ CD19, Human recombinant

**CATALOG NO**: 9246-10 10 μg

9246-25 25 µg

**ALTERNATE NAMES:** CD19, B4, CVID3, MGC12802

**SOURCE**: HEK 293 cells (Pro 20 - Lys 291)

**PURITY:** > 95% by SDS – PAGE

MOL. WEIGHT: This protein is fused with (6x) His tag at C terminus and the protein

has a calculated MW of 31.6 kDa. The predicted N-terminus is Pro 20. The protein migrates as 40-65 kDa in SDS-PAGE under

reducing conditions due to glycosylation.

**ENDOTOXIN LEVEL:** < 1.0 EU per 1µg of protein (determined by LAL method)

FORM: Lyophilized

FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4.

Generally Mannitol or Trehalose is added as a protectant before

lyophilization.

**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C and

use within 3 months. Avoid repeated freezing and thawing cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can

be stored at 2-8°C for up to 1 month. For extended storage, it is

recommended to store at -20°C.

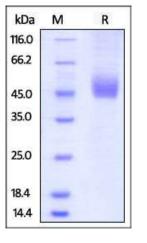
**DESCRIPTION:** B-lymphocyte antigen CD19 is also known as CD19 (Cluster of

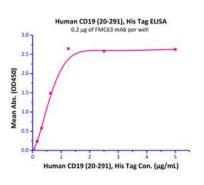
Differentiation 19), is a single-pass type I membrane protein which contains two Iq-like C2-type (immunoglobulin-like) domains. CD19 is expressed on follicular dendritic cells and B cells. In fact, it is present on B cells from earliest recognizable B-lineage cells during development to B-cell blasts 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 cellspecific 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, antiimmunoglobulin 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.

**BIOACTIVITY:** Immobilized FMC63 mAb at 2μg/ml (100μl/well) can bind Human CD19 (20-291), His Tag with a linear range of 0.04-0.6 μg/ml.





The purity of Human CD19, His Tag was determined by SDS-PAGE under reducing (R) condition and staining overnight

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## **RELATED PRODUCT:**

- Human CellExp™ CCL6, mouse recombinant (Cat. No. 7226-10, -50)
- Human CellExp™ CD155, human recombinant (Cat. No. 7462-10, -50)
- Human CellExp™ CD160/BY55, human recombinant (Cat. No. 7386-10, -50)
- Human CellExp<sup>™</sup> CD166/ ALCAM, human recombinant (Cat. No. 7437-10, -50)
- Human CellExp™ CD172A / SIRP, human recombinant (Cat. No. 7506-10, -50)
- Human CellExp™ CD33 / SIGLEC-3, human recombinant (Cat. No. 7370-10, -50)
- Human CellExp™ CD47, human recombinant (Cat. No. 7385-10, -50)
- Human CellExp™ CD55/DAF, human recombinant (Cat. No. 7432-10, -50)
- Human CellExp™ CD58 /LFA-3, human recombinant (Cat. No. 7427-10, -50)
- Human CellExp™ CD62E/E-Selectin, human recombinant (Cat. No. 7434-20, -100)
- Human CellExp™ CD71 / TFRC / TFR, human recombinant (Cat. No. 7279-10, -50
- Human CellExp<sup>™</sup> CD273, human recombinant (Cat. No. 7369-10, -50)
- Human CellExp™ CD36, human recombinant (Cat. No. 7371-10, -50)

FOR RESEARCH USE ONLY! Not to be used on humans.

