# Recombinant Protein Technical Manual

## Recombinant Human CD19/Leu2 Protein (Fc Tag)(Active)

**RPES5026**

## Product Data:

**Product SKU:** RPES5026

**Size:** 10µg

**Species**: Human

**Expression host:** Human Cells

**Uniprot:** P15391

## Protein Information:

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|---|---|
| **Molecular Mass:** | 57.3 kDa |
| **AP Molecular Mass:** | 78 kDa |
| **Tag:** | C-Fc |
| **Bio-activity:** | Immobilized Human FMC63 at 2µg/ml(100 µl/well) can bind Human CD19-Fc. The ED50 of Human CD19-Fc is 2.48 ug/ml . |
| **Purity:** | > 80 % as determined by reducing SDS-PAGE. |
| **Endotoxin:** | < 1.0 EU per µg as determined by the LAL method. |
| **Storage:** | Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months. |
| **Shipping:** | This product is provided as lyophilized powder which is shipped with ice packs. |
| **Formulation:** | Lyophilized from a 0.2 µm filtered solution of 20mM PB,150mM NaCl,1%BSA,0.05%NaN3,pH 7.4. |
| **Reconstitution:** | Please refer to the printed manual for detailed information. |
| **Application:** | Functional ELISA |
| **Synonyms:** | B-Lymphocyte Antigen CD19; B-Lymphocyte Surface Antigen B4; Differentiation Antigen CD19; T-Cell Surface Antigen Leu2; CD19; CVID3 |

## Immunogen Information:

**Sequence:** Pro20-Lys291

## Background:

CD19 is a single-pass type I membrane protein containing 2 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. CD19 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. CD19 Assembles with the antigen receptor of B lymphocytes in order to decrease the threshold for antigen receptor-dependent stimulation. Defects in CD19 are the cause of immunodeficiency common variable type 3 (CVID3) which is a primary immunodeficiency characterized by antibody deficiency, hypogammaglobulinemia, recurrent bacterial infections and an inability to mount an antibody response to antigen.