

## Recombinant Human CD19

Catalog No: C572

Description Recombinant Human CD19 is produced by our Mammalian expression system and the target gene

encoding Pro20-Lys291 is expressed with a Fc tag at the C-terminus.

Source Human Cells

Alternative name B-Lymphocyte Antigen CD19; B-Lymphocyte Surface Antigen B4; Differentiation Antigen CD19; T-

Cell Surface Antigen Leu-12; CD19

Accession No. P15391

Formulation Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

Reconstitution

It is not recommended to reconstitute to a concentration less than 100µg/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

**Shipping** The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Storage Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Amino Acid Sequence PEEPLVVKVEEGDNAVLQCLKGTSDGPTQQLTWSRESPLKPFLKLSLGLPGLGIHMRPLAIWLFIFNVS

QQMGGFYLCQPGPPS

EKAWQPGWTVNVEGSGELFRWNVSDLGGLGCGLKNRSSEGPSSPSGKLMSPKLYVWAKDRPEIWE

GEPPCLPPRDSLNQSL

 ${\tt SQDLTMAPGSTLWLSCGVPPDSVSRGPLSWTHVHPKGPKSLLSLELKDDRPARDMWVMETGLLLPR}$ 

ATAQDAGKYYCHRGN

LTMSFHLEITARPVLWHWLLRTGGWKVDDIEGRMDEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKP

**KDTLMISRTPEVTCVVV** 

DVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPA

PIEKTISKAKGQPREPQ

VYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS

RWQQGNVFSCSVMHE ALHNHYTQKSLSLSPGK

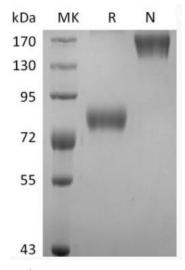
**Background** 

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.









## SEC-HPLC

