

Recombinant Human CD19 Protein (Glu21-Lys291), C-Fc-tagged, Atto 647N Conjugated

Product Information

Cat	IMP-10102
Official Symbol	CD19
Product Overview	<i>Atto 647N conjugated recombinant human CD19 protein (Glu21-Lys291) with a human IgG1 (Pro100-Lys330) Fc tag at C-terminus was expressed in Chinese Hamster Ovary cell line. Disulfide-linked homodimer, labeled with Atto 647N via amines Excitation Wavelength: 647 nm Emission Wavelength: 667 nm</i>
Description	<p><i>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.</i></p>
Expression System	CHO
Species	Human
Tag	C-Fc
Predicted N Terminal	Glu21
Form	Supplied as a 0.2 µm filtered solution in PBS with BSA as a carrier protein.
Conjugate	Atto 647N
Molecular Mass	Predicted Molecular Mass: 57 kDa SDS-PAGE: 77-92 kDa, under reducing conditions

Protein length	Glu21-Lys291
Bio-activity	Measured by flow cytometry for its ability to bind anti-Human CD19 Monoclonal Antibody conjugated fluorescent beads.
Endotoxin	
Purity	>90%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie Blue Staining.
Notes	Disulfide-linked homodimer
Storage	Protect from light. Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 6 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after opening. 3 months, -20 to -70 centigrade under sterile conditions after opening.

SDS-PAGE