

## IVMB0524

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**Product Information**

<b>Product SKU:</b>	IVMB0524	<b>Clone:</b>	10F381	<b>Target:</b>	CD20
<b>Size:</b>	50 µg			<b>Isotype:</b>	Human IgG1κ

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**Additional Information**

<b>Reactivity:</b>	Human/Rhesus Monkey/Cynomolgus Monkey	<b>Host Species:</b>	Human
<b>Antibody Type:</b>	Biosimilar Recombinant Human Monoclonal Antibody	<b>Expression Host:</b>	HEK-293 Cells

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**Immunogen Information**

**Background:** CD20 is a 33-37 kD transmembrane-spanning phosphoprotein found on the surface of developing B-cells and various B-cell malignancies. CD20 is a popular target for mAb therapy because depleting developing B-cells generally does not cause permanent side effects (due to the fact that mature plasma cells and B-cell progenitors do not express CD20 and that there is limited expression of CD20 among other cell lineages). Rituximab is a chimeric monoclonal antibody that binds to CD20. The precise function of CD20 is still unknown. However, it is suspected to play a role in Ca<sup>2+</sup> influx across plasma membranes, maintaining intracellular Ca<sup>2+</sup> concentration, and allowing the activation of B cells. Rituximab is used to treat some autoimmune diseases and types of cancer such as non-Hodgkin lymphoma, chronic lymphocytic leukemia, and rheumatoid arthritis among others. The Fc portion of Rituximab mediates antibody-dependent cellular cytotoxicity (ADCC) and complement-dependent cytotoxicity (CDC). Rituximab increases MHC II and adhesion molecules LFA-1 and LFA-3 (lymphocyte function-associated antigen) and also induces apoptosis of CD20+ cells. This ultimately results in the elimination of B cells (including the cancerous ones) from the body, and thus allows a new population of healthy B cells to develop from lymphoid stem cells. Anti-Human CD20 (Rituximab) utilizes the same variable regions from the therapeutic antibody Rituximab making it ideal for research projects.

**Product Concentration:** 0.2 mg/ml

**Applications:** FC

<b>Synonyms:</b>	B1; S7; Bp35; CVID5; MS4A2; LEU-16; MS4A1; membrane spanning 4-domains A1
<b>Antigen Distribution:</b>	CD20 is primarily found on the surface of immune system B cells. CD20 is highly expressed in the lymph node, and to a lesser extent, the spleen and appendix.
<b>Immunogen:</b>	Human lymphoblastoid cell line SB.
<b>Formulation:</b>	This Allophycocyanin (APC) conjugate is formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.4, 1% BSA and 0.09% sodium azide as a preservative.
<b>Specificity:</b>	This non-therapeutic biosimilar antibody uses the same variable region sequence as the therapeutic antibody Rituximab. Clone 10F381 recognizes human CD20. This product is for research use only.
<b>Pathogen Testing:</b>	-
<b>Storage &amp; Handling:</b>	This Allophycocyanin (APC) conjugate is stable when stored at 2-8°C. Do not freeze.