

# Anti-CD19 Antibody [PSH13-44] - BSA and Azide free

## HA751463



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human
<b>Applications:</b>	WB, IF-Cell, FC
<b>Molecular Wt:</b>	Predicted band size: 61 kDa
<b>Clone number:</b>	PSH13-44

**Description:** B-lymphocyte antigen CD19, also known as CD19 molecule (Cluster of Differentiation 19), B-Lymphocyte Surface Antigen B4, T-Cell Surface Antigen Leu-12 and CVID3 is a transmembrane protein that in humans is encoded by the gene CD19. In humans, CD19 is expressed in all B lineage cells. Contrary to some early doubts, human plasma cells do express CD19. CD19 plays two major roles in human B cells: on the one hand, it acts as an adaptor protein to recruit cytoplasmic signaling proteins to the membrane; on the other, it works within the CD19/CD21 complex to decrease the threshold for B cell receptor signaling pathways. Due to its presence on all B cells, it is a biomarker for B lymphocyte development, lymphoma diagnosis and can be utilized as a target for leukemia immunotherapies.

**Immunogen:** Recombinant protein within human CD19 aa 1-291.

**Positive control:** Raji cell lysate, Ramos cell lysate, Daudi cell lysate, Raji, Ramos, human peripheral blood cells.

**Subcellular location:** Cell membrane, Membrane raft.

**Database links:** SwissProt: P15391 Human

**Recommended Dilutions:**

<b>WB</b>	1:50,000
<b>IF-Cell</b>	1:2,000
<b>FC</b>	1:5,000

**Storage Buffer:** PBS (pH7.4).

**Storage Instruction:** Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

**Purity:** Protein A affinity purified.

**Hangzhou Huaan Biotechnology Co., Ltd.**

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Technical:0086-571-89986345

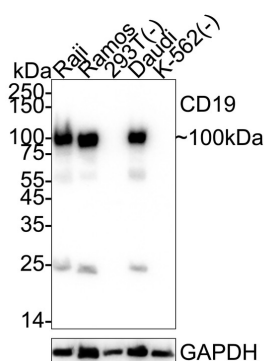
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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

## Images

**Fig1:** Western blot analysis of CD19 on different lysates with Rabbit anti-CD19 antibody (HA751463) at 1/50,000 dilution.



Lane 1: Raji cell lysate

Lane 2: Ramos cell lysate

Lane 3: 293T cell lysate (negative)

Lane 4: Daudi cell lysate

Lane 5: K-562 cell lysate (negative)

Lysates/proteins at 20 µg/Lane.

Predicted band size: 61 kDa

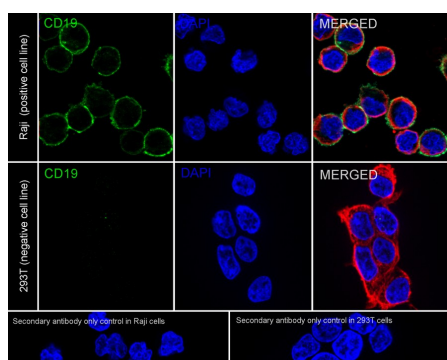
Observed band size: 100 kDa

Exposure time: 25 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA751463) at 1/50,000 dilution was used in primary antibody dilution (K1803) at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

**Fig2:** Immunocytochemistry analysis of Raji (positive) and 293T (negative) labeling CD19 with Rabbit anti-CD19 antibody (HA751463) at 1/2,000 dilution.



Cells were fixed in 4% paraformaldehyde for 15 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-CD19 antibody (HA751463) at 1/2,000 dilution in 1% BSA in PBST overnight at 4 °C. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (HA601187, red) was stained at 1/100 dilution overnight at +4°C. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

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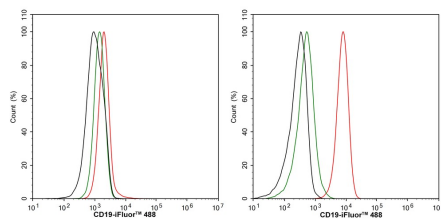
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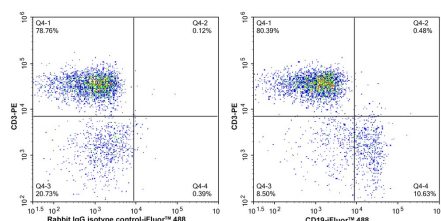
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**Fig3:** Flow cytometric analysis of K-562 (left, negative) and Ramos (right, positive) cells labeling CD19.

Cells were washed twice with cold PBS and resuspend. Then stained with the primary antibody (HA751463, 1/5,000) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).



**Fig4:** Flow cytometric analysis of human peripheral blood cells labeling CD19 (HA751463), counterstained with CD3-PE.

Cells were washed twice with cold PBS and resuspend. Then stained with the primary antibody (HA751463, 1/1,000). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃.

**Note:** All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

## Background References

1. Pecher AC et al. CD19-Targeting CAR T Cells for Myositis and Interstitial Lung Disease Associated With Antisynthetase Syndrome. JAMA. 2023 Jun
2. Fischbach F et al. CD19-targeted chimeric antigen receptor T cell therapy in two patients with multiple sclerosis. Med. 2024 Jun

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