bs-0079R **[Primary Antibody]**

CD19 Rabbit pAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 930 **SWISS:** P15391

Target: CD19

Immunogen: KLH conjugated synthetic peptide derived from human CD19: 485-556/556. < Cytoplasmic >

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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. [provided by RefSeq, Jul 2020]

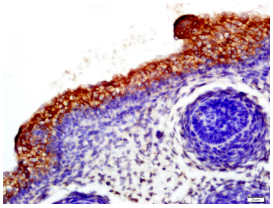
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1μg/Test)

Reactivity: Human, Mouse, Rat (predicted: Pig, Cow, GuineaPig, Horse)

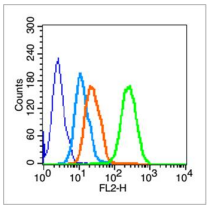
Predicted MW.: 59 kDa

Subcellular Location: Cell membrane

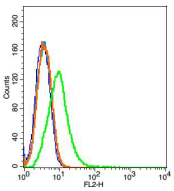
VALIDATION IMAGES



Tissue/cell: mouse fetal skin; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-CD19 Polyclonal Antibody, Unconjugated(bs-0079R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control (blue line): HL60 cells (blue). Primary Antibody (green line): Rabbit Anti-CD19 antibody (bs-0079R) Dilution: 1μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE Dilution: 1μg /test. Protocol The cells were fixed with 70% methanol (Overnight at 4°C) . Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature.



Blank control: Raji(blue). Primary Antibody: Rabbit Anti-CD19 antibody(bs-0079R), Dilution: 5μg in 100 μL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG (orange) ,used under the same conditions. Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA. Protocol Primary antibody (bs-0079R, 5μg /1x10^6 cells) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the

The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=14.6]** Qianying Ouyang. et al. eIF3a function in immunity and protection against severe sepsis by regulating B cell quantity and function through m6A modification. ACTA PHARM SIN B. 2025 Feb;: IF,FC ;Mouse. 40370535
- **[IF=7.419]** Hirona Kugo. et al. Tricaprin can prevent the development of AAA by attenuating aortic degeneration. BIOMED PHARMACOTHER. 2023 Apr;160:114299 IHC ;Rat. 36724640
- **[IF=6.922]** Maoyu Ye. et al. Long-Term Exposure to Sulfur Dioxide Before Sensitization Decreased the Production of Specific IgE in HDM-Sensitized Allergic Rhinitis Mice. J INFLAMM RES. 2022; 15: 2477–2490 IF ;Mouse. 35465447
- **[IF=5.999]** Jinsheng Li. et al. Micro/nano-topography Promotes Osteogenic Differentiation of Bone Marrow Stem Cells by Regulating Periostin Expression. COLLOID SURFACE B. 2022 Jul;:112700 FCM ;Rat. 35907353
- **[IF=4.344]** Gitto SB et al. Identification of a novel IL-5 signaling pathway in chronic pancreatitis and crosstalk with pancreatic tumor cells. Cell Commun Signal. 2020 Jun 17;18(1):95. IHC ;Mouse. 32552827