

# ABflo® 647 Rabbit anti-Human/Monkey CD19 mAb

Catalog No.: A23009

## Basic Information

### Observed MW

Refer to figures

### Calculated MW

63kDa

### Category

Primary antibody

### Applications

FC

### Cross-Reactivity

Human, Cynomolgus

### CloneNo number

ARC57915


### Conjugate

ABflo® 647. Ex:648nm. Em:664nm.

## Recommended Dilutions

FC 5 µl per 10<sup>6</sup> cells in  
100 µl volume

## Contact

 | 400-999-6126 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn) | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## 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.

## Immunogen Information

### Gene ID

102145514

### Swiss Prot

### Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

### Synonyms

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

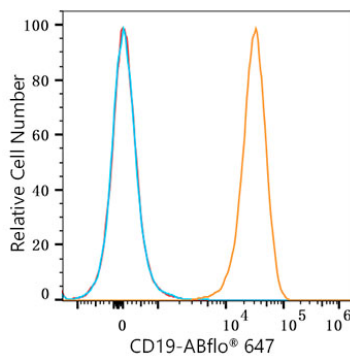
Affinity purification

### Storage

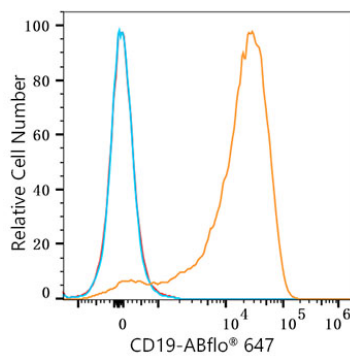
Store at 2-8°C. Avoid freeze.

Buffer: PBS containing 0.2% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

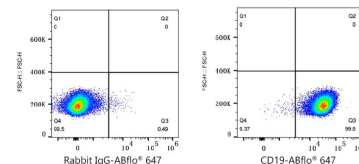
## Validation Data



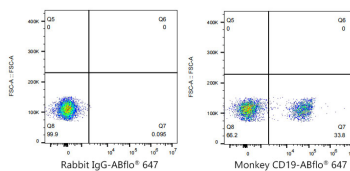
Flow cytometry:  $1 \times 10^6$  Raji cells were surface-stained with ABflo® 647 Rabbit anti-Human/Monkey CD19 mAb (A23009, 5  $\mu$ l/Test, orange line) or ABflo® 647 Rabbit IgG isotype control (A22070, 5  $\mu$ l/Test, blue line). Non-fluorescently stained Raji cells was used as blank control (red line).



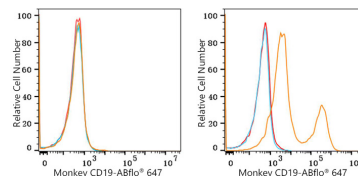
Flow cytometry:  $1 \times 10^6$  Daudi cells were surface-stained with ABflo® 647 Rabbit anti-Human/Monkey CD19 mAb (A23009, 5  $\mu$ l/Test, orange line) or ABflo® 647 Rabbit IgG isotype control (A22070, 5  $\mu$ l/Test, blue line). Non-fluorescently stained Daudi cells was used as blank control (red line).



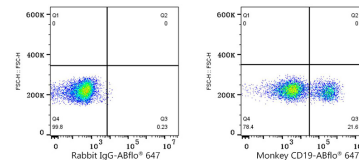
Flow cytometry:  $1 \times 10^6$  Raji cells were surface-stained with ABflo® 647 Rabbit IgG isotype control (A22070, 5  $\mu$ l/Test, left) or ABflo® 647 Rabbit anti-Human/Monkey CD19 mAb (A23009, 5  $\mu$ l/Test, right).



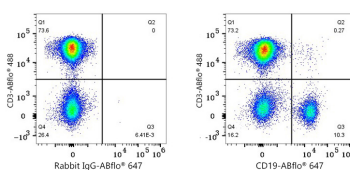
Flow cytometry:  $1 \times 10^6$  Cynomolgus PBMC were surface-stained with ABflo® 647 Rabbit IgG isotype control (A22070, 5  $\mu$ l/Test, left) or ABflo® 647 Rabbit anti-Human/Monkey CD19 mAb (A23009, 5  $\mu$ l/Test, right).



Flow cytometry:  $1 \times 10^6$  293F cells (negative control, Left) and 293F (Transfection, right) cells were surface-stained with ABflo® 647 Rabbit anti-Human/Monkey CD19 mAb (A23009, 5  $\mu$ l/Test, orange line) or ABflo® 647 Rabbit IgG isotype control (A22070, 5  $\mu$ l/Test, blue line). Non-fluorescently stained cells was used as blank control (red line).



Flow cytometry:  $1 \times 10^6$  293F (Transfection) cells were surface-stained with ABflo® 647 Rabbit IgG isotype control (A22070, 5  $\mu$ l/Test, left) or ABflo® 647 RRabbit anti-Human/Monkey CD19 mAb (A23009, 5  $\mu$ l/Test, right).



Flow cytometry:  $1 \times 10^6$  Human PBMC were surface-stained with ABflo® 488 Rabbit anti-Human/Monkey CD3 (A26283, 5  $\mu$ l/Test) and ABflo® 647 Rabbit IgG isotype control (A22070, 5  $\mu$ l/Test, left) or ABflo® 647 Rabbit anti-Human/Monkey CD19 mAb (A23009, 5  $\mu$ l/Test, right). Cells in the lymphocyte gate were used for analysis.