

A24260

Leader in Biomolecular Solutions for Life Science



Human IgM (FC) Rabbit mAb

Catalog No.: A24260

Recombinant

Basic Information

Observed MW

75kDa

Calculated MW

49kDa

Category

Monoclonal Antibody

Applications

WB,IHC-P,IF/ICC,FC,ELISA

Cross-Reactivity

Human

CloneNo number

ARC63173

Recommended Dilutions

WB 1:1000 - 1:4000

IF/ICC 1:200 - 1:800

IHC-P 1:200 - 1:800

FC 1:500 - 1:1000

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Contact

 www.abclonal.com

Background

Immunoglobulins (Ig) are the antigen recognition molecules of B cells. An Ig molecule is made up of 2 identical heavy chains and 2 identical light chains (see MIM 147200) joined by disulfide bonds so that each heavy chain is linked to a light chain and the 2 heavy chains are linked together. Each Ig heavy chain has an N-terminal variable (V) region containing the antigen-binding site and a C-terminal constant (C) region, encoded by an individual C region gene, that determines the isotype of the antibody and provides effector or signaling functions. The heavy chain V region is encoded by 1 each of 3 types of genes: V genes (see MIM 147070), joining (J) genes (see MIM 147010), and diversity (D) genes (see MIM 146910). The C region genes are clustered downstream of the V region genes within the heavy chain locus on chromosome 14. The IGHM gene encodes the C region of the mu heavy chain, which defines the IgM isotype. Naive B cells express the transmembrane forms of IgM and IgD (see IGHG; MIM 1471770) on their surface. During an antibody response, activated B cells can switch to the expression of individual downstream heavy chain C region genes by a process of somatic recombination known as isotype switching. In addition, secreted Ig forms that act as antibodies can be produced by alternative RNA processing of the heavy chain C region sequences. Although the membrane forms of all Ig isotypes are monomeric, secreted IgM forms pentamers, and occasionally hexamers, in plasma (summary by Janeway et al., 2005).

Immunogen Information

Gene ID

3507

Swiss Prot

P01871

Immunogen

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

Synonyms

MU; VH; AGM1; Human IgM

Product Information

Source

Rabbit

Isotype

IgG

Purification

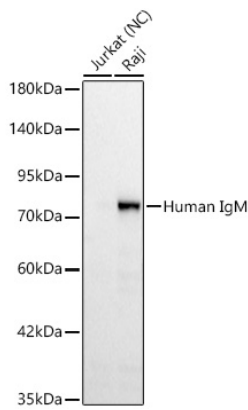
Affinity purification

Storage

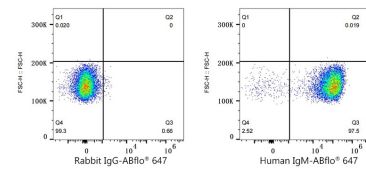
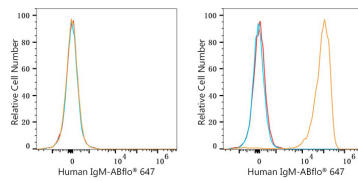
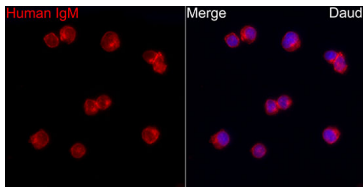
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

Validation Data



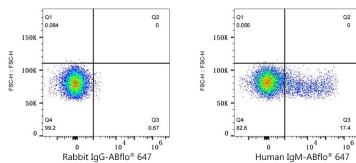
Western blot analysis of lysates from Raji cells, using Human IgM (FC) Rabbit mAb (A24260) at 1:1000 dilution.
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
 Lysates/proteins: 25µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Negative control (NC): Jurkat
 Exposure time: 20s.



Confocal imaging of Daudi cells using Human IgM (FC) Rabbit mAb (A24260, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.

Flow cytometry: 1×10^6 Jurkat cells (negative control, left) and Daudi cells (right) were surface-stained with Human IgM (FC) Rabbit mAb (A24260, 2 µg/mL, orange line) or ABflo® 647 Rabbit IgG isotype control (A22070, 5 µl/Test, blue line), followed by Alexa Fluor® 647 conjugated goat anti-rabbit pAb staining. Non-fluorescently stained cells were used as blank control (red line).

Flow cytometry: 1×10^6 Daudi cells were surface-stained with Rabbit IgG isotype control (AC042, 2 µg/mL, left) or Human IgM (FC) Rabbit mAb (A24260, 2 µg/mL, right), followed by Alexa Fluor® 647 conjugated goat anti-rabbit pAb staining.



Flow cytometry: 1×10^6 Human PBMC were surface-stained with Rabbit IgG isotype control (AC042, 2 µg/mL, left) or Human IgM (FC) Rabbit mAb (A24260, 2 µg/mL, right), followed by Alexa Fluor® 647

Validation Data

conjugated goat anti-rabbit pAb
staining.