Leader in Biomolecular Solutions for Life Science

www.abclonal.com

Rabbit anti-Human IgM mAb

Catalog No.: A24260

Basic Information

Observed MW
75kDa

Calculated MW
49kDa

Category
Primary antibody

Applications
WB,IF/ICC,FC,ELISA

Cross-Reactivity
Human

CloneNo number
ARC63173

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 IGHD; 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).

Recommended Dilutions

WB	1:1000 - 1:4000
IF/ICC	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.

Immunogen Information

Gene ID
3507

Swiss Prot
P01871

Immunogen
Recombinant fusion protein containing a sequence corresponding to amino acids 218-453 of Human IgM(P01871).

Synonyms
MU; VH; AGM1; Human IgM

Contact

400-999-6126

cn.market@abclonal.com.cn

www.abclonal.com.cn

Product Information

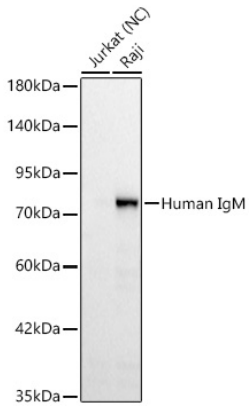
Source
Rabbit

Isotype
IgG

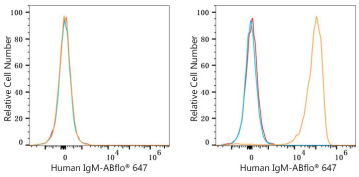
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.

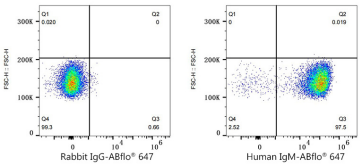
Validation Data



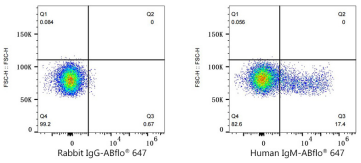
Western blot analysis of lysates from Raji cells, using Rabbit anti-Human IgM mAb (A24260) at 1:1000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic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



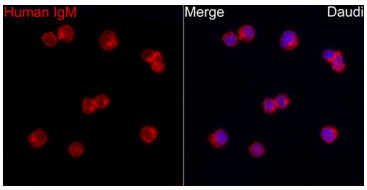
Flow cytometry: 1X10^6 Jurkat cells (negative control,left) and Daudi cells (right) were surface-stained with Rabbit anti-Human IgM mAb (A24260,2 µg/mL,orange line) or ABflo® 647 Rabbit IgG isotype control (A22070,5 µl/Test,blue line), followed by Alexa Fluor® 647 conjugated goat anti-rabbit pAb staining. Non-fluorescently stained cells were used as blank control (red line).



Flow cytometry: 1X10^6 Daudi cells were surface-stained with Rabbit IgG isotype control (AC042,2 µg/mL,left) or Rabbit anti-Human IgM mAb (A24260,2 µg/mL,right), followed by Alexa Fluor® 647 conjugated goat anti-rabbit pAb staining.



Flow cytometry: 1X10^6 Human PBMC were surface-stained with Rabbit IgG isotype control (AC042,2 µg/mL,left) or Rabbit anti-Human IgM mAb (A24260,2 µg/mL,right), followed by Alexa Fluor® 647 conjugated goat anti-rabbit pAb staining.



Confocal imaging of Daudi cells using Rabbit anti-Human IgM 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.