

# Human IgM Rabbit mAb

Catalog No.: A24831 **Recombinant**

## Basic Information

**Observed MW**

75kDa

**Calculated MW**

49kDa

**Category**

Primary antibody

**Applications**

WB, IHC-P, IF/ICC, ELISA

**Cross-Reactivity**

Human

**CloneNo number**

ARC63245

## 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**IHC-P** 1:200 - 1:800**IF/ICC** 1:200 - 1:800**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 protein (or fragment). This information is considered to be commercially sensitive.

**Synonyms**

MU; VH; AGM1; Human IgM

## Contact

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## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

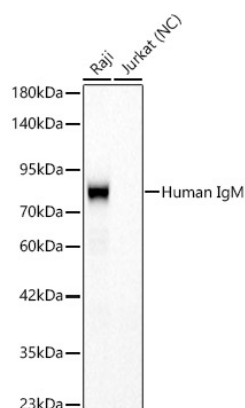
Affinity purification

**Storage**

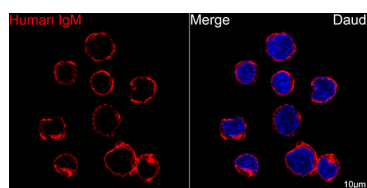
Store at -20°C. Avoid freeze / thaw cycles.

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.

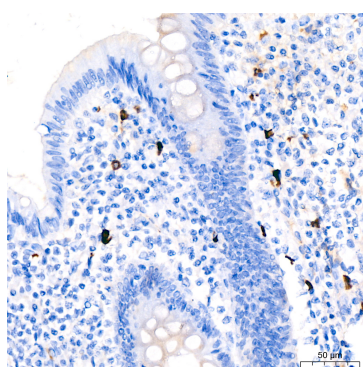
## Validation Data



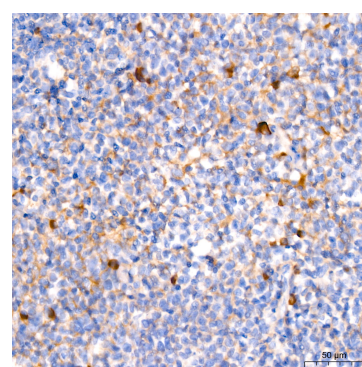
Western blot analysis of various lysates, using Human IgM Rabbit mAb (A24831) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Negative control(NC):Jurkat Exposure time: 15s.



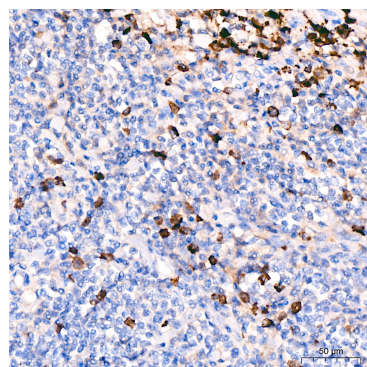
Confocal imaging of Daudi cells using Human IgM Rabbit mAb (A24831, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



Immunohistochemistry analysis of paraffin-embedded Human appendix tissue using Human IgM Rabbit mAb (A24831) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using Human IgM Rabbit mAb (A24831) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human B-cell lymphoma using Human IgM Rabbit mAb (A24831) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 9.0) prior to IHC staining.