

Product datasheet

Anti-Human IgM antibody [EPR5539-65-4] ab134159

Recombinant RabMAb

[2 References](#) [4 Images](#)

Overview

Product name	Anti-Human IgM antibody [EPR5539-65-4]
Description	Rabbit monoclonal [EPR5539-65-4] to Human IgM
Host species	Rabbit
Specificity	ab134159 only recognizes the mu chain of IgM.
Tested applications	Suitable for: WB, IP, IHC-P Unsuitable for: ICC
Species reactivity	Reacts with: Human
Immunogen	Full length native protein (purified) corresponding to Human Human IgM.
Positive control	IHC: Human tonsil tissue. WB: Raji cells; IP: Raji cells.
General notes	Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information [see here](#).

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb[®] patents](#).

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and

species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR5539-65-4
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab134159** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Detects a band of approximately 75 kDa.
IP		1/10 - 1/100.
IHC-P		1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Application notes Is unsuitable for ICC.

Target

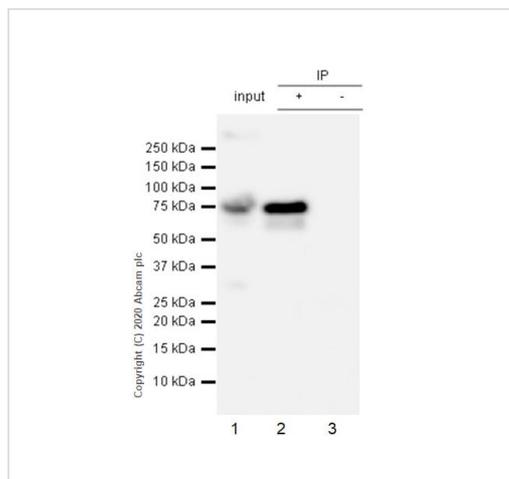
Relevance IgM normally constitutes about 10% of serum immunoglobulins. IgM antibody is prominent in early

immune responses to most antigens and is largely confined to plasma due to its large size. Monomeric IgM is expressed as a membrane bound antibody on the surface of B cells and as a pentamer when secreted by plasma cells. Due to its high valency IgM is more efficient than other isotypes in binding antigens with repeating epitopes (virus particles and red blood cells) and is more efficient than IgG in activating the complement pathway. The gene for the mu constant region contains four domains separated by short intervening sequences. IgM measurement yields information about the body's immediate resistance and response to infection as well as information related to specific diseases. Decreased levels are associated with immune deficiency states, hereditary deficiencies, and myeloma. Increased levels can be associated with Waldenstrom's macroglobulinemia, chronic infection and hepatocellular disease.

Cellular localization

Cell Membrane and Secreted

Images



Immunoprecipitation - Anti-Human IgM antibody [EPR5539-65-4] (ab134159)

Purified ab134159 at 1/20 dilution (1 µg) immunoprecipitating Human IgM in Raji whole cell lysate.

Lane 1 (input): Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysate 10 µg

Lane 2 (+): ab134159 + Raji whole cell lysate.

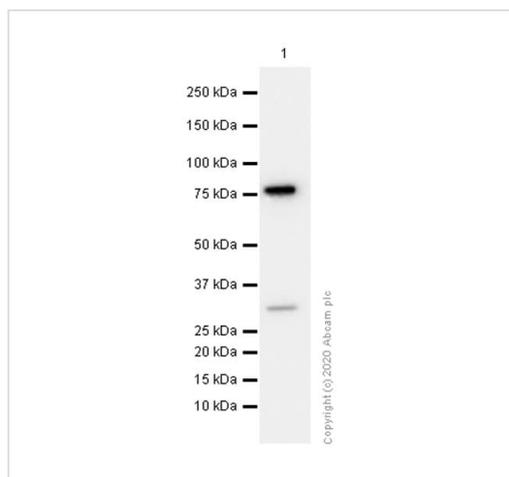
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab134159 in Raji whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) (ab131366) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm/TBST.

Observed band size: 75 kDa



Western blot - Anti-Human IgM antibody [EPR5539-65-4] (ab134159)

Anti-Human IgM antibody [EPR5539-65-4] (ab134159) at 1/1000 dilution (Purified) + Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysate at 15 µg

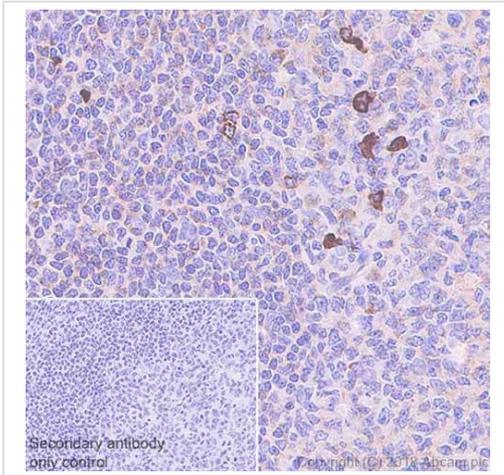
Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 75 kDa

[why is the actual band size different from the predicted?](#)

Blocking Buffer and concentration: 5% NFDm/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue sections labeling Human IgM with Purified ab134159 at 1:1000 dilution (0.16 µg/ml). Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Human IgM antibody [EPR5539-65-4] (ab134159)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-Human IgM antibody [EPR5539-65-4] (ab134159)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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