

MERCK

Experience the next revolution

of Recombinant Rabbit Monoclonal
Antibodies and Beyond

ZooMAb® Antibodies

The life science
business of Merck
operates as
MilliporeSigma in the
U.S. and Canada.

Sigma-Aldrich®
Lab & Production Materials

what is a **ZooMab® antibody?**

ZooMab® antibodies represent an entirely new generation of recombinant monoclonal antibodies.

They are specifically engineered to combine state-of-the-art consistency and applications performance with the most user-friendly formulation, handling, and storage features available today. With a long history of delivering highly cited antibodies for research applications, we are excited to provide you with the next revolution in recombinant monoclonal antibody technology.

Unlike previous conventional technologies, ZooMab® antibodies are developed from a proprietary B-cell

transfection and recombinant expression platform using tissue culture-based methods. This technology opens the door to a much wider "Zoological" range of species to produce recombinant monoclonal antibodies. Our first group of ZooMab® antibodies are rabbit-derived, which are well recognized today for producing monoclonal antibodies of the highest affinity and specificity, but future iterations will be from a variety of species.



Revolutionary

Completely reinvented feature loaded platform

Pure

Free of animal components, BSA, biocides such as sodium azide, and preservatives

Reproducible

Recombinantly produced for lot-to-lot consistency

Visible

Transparent, free standing vials to help see product clearly

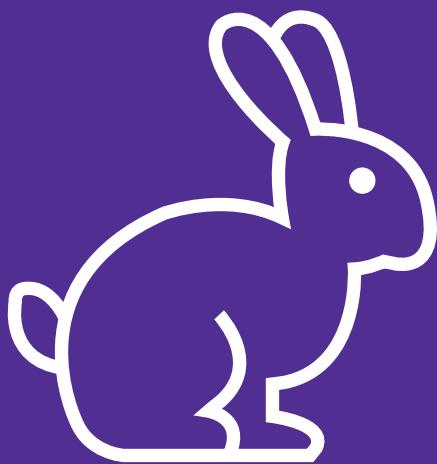
Sustainable

Shipped ambiently for the environment and to reduce shipping costs

Stable

Lyophilized for long term stability & storage

Rabbit mAbs tend to be superior compared to mouse mAbs



Rabbits are known to elicit stronger immune response against any foreign antigen compared to other commonly used murine species. As such, rabbits naturally have a higher success rate at producing an immune response to "difficult" immunogens, which include small molecules (compounds of <600 kDa), peptides, and antibodies specific for post-translational modification sites (PTM). These types of molecules are either non-immunogenic or produce poor binders in mice.

Furthermore, rabbits will typically recognize a higher diversity of epitopes per antigen, including epitopes of human antigens. This not only enhances the range of antibodies that can be generated to detect useful therapeutic drugs or their drug targets, but it also enhances the ability to identify non-competing antibody species, which can enable "capture and detection" modalities for the target assay.

In quantitative terms, rabbit monoclonal antibodies can detect antigens at the picomolar level with high specificity, whereas mouse monoclonal antibodies typically operate at an upper limit of the nanomolar range with medium/high specificity. As a result, mouse antibodies work well in standard assays like Western blotting and immunoprecipitation (IP) whereas rabbit antibodies tend to provide excellent results in standard assays as well as staining applications, such as immunohistochemistry (IHC) and immunocytochemistry (ICC).

Recombinant and purified for highest reproducibility and performance

Each ZooMAb® antibody is manufactured using our proprietary recombinant expression system, purified to homogeneity, and precisely dispensed to produce robust and highly reproducible lot-to-lot consistency. Only top-performing clones are released for use by researchers. Each antibody is validated for high specificity and affinity across multiple applications, including its most commonly used application. ZooMAb® antibodies are reliably available and ready to ship when you need them.

Lyophilized and pre-aliquoted for maximum stability and convenience

Every ZooMAb® antibody is provided as a lyophilized product, dispensed in 25 µL equivalences, and stored in a clear polypropylene tube that is specifically designed with an o-ring to ensure an air-tight seal. Each antibody is individually packaged to provide long-term stability, faster shipping, and minimize non-value-added costs that typically incur through cold chain handling of liquids, including the thermal insulated packaging used in transportation. In addition, the lyophilized product is exceptionally stable allowing ambient shipping and storage if needed.

Pre-calibrated concentrations for consistent application-specific titers

ZooMAb® antibodies are recombinantly produced, purified and pre-aliquoted for you. The material in each tube is always calibrated to work at the titers suggested for the different applications. Every antibody is tested in our own laboratory to work in at least 3 applications before we release them for sale. We ensure that each antibody will perform the way you would expect it to in western blotting, immunofluorescence, and other common applications as listed on our product information page. As these are recombinant antibodies that have been carefully selected, cloned, and purified for high affinity and specificity performance, their effective concentrations are typically lower as compared to conventional antibodies that typically require much more material.

Preservative-free for safety and simplicity

Every ZooMAb® antibody is provided free of biocides like sodium azide or preservatives of animal origin, such as bovine serum albumin (BSA), and finished in a simple phosphate buffered saline (PBS) with trehalose. With ZooMAb® antibodies, complications arising from potentially hazardous materials or local safety restrictions are minimized and allow its use in both *in vivo* and *in vitro* applications.

Multiple package sizes so you never buy more than you need

Every ZooMAb® Antibody is pre-aliquoted at 25 µL lyophilized equivalents, and we offer 4X25 µL packages at progressive discounts. Hence, you can use only the quantity you really need for your research and simplify reagent sharing.

The pre-aliquoted design of each pack size allows you to split your purchase without ever having to resuspend the material, which maximizes product shelf life.



Why you should always look for a ZooMAb® antibody first

	Rabbit Polyclonal	Mouse Monoclonal	ZooMAb® Recombinant Monoclonal
Reproducibility	•	••	•••
Specificity	•	••	•••
Precision	•	••	•••
Storage/Stability	•	•	•••
Affinity for IHC	•	•	•••
Host Sacrifice	Required	Required	Not required
Stable DNA Clone	No	No	Yes
Format	Liquid	Liquid	Lyophilized powder
Preservatives/ Additives	Yes	Yes	No
Pack Size	Single	Single	Multiple
Shipping	Ice	Ice	Ambient/room temperature

There is never any guessing with ZooMAb® antibodies. All antibodies are offered at the same pack sizes and price points, no matter what the target is.

With ZooMAb® antibodies you can be sure to get the same feature-loaded product, for every single target, every single lot, stable, pure, and packaged for maximum shelf life stability.

It is easy to stay in touch with us to find your target

Use the convenient QR code printed on each ZooMAb® product label to take you to our website. This is where you can find up to date information on all the newest additions to our ZooMAb® antibody portfolio and share your experience with these products.

Our ZooMAb® antibodies are designed and tested with your needs in our mind and are backed by our Antibody Bioguarantee.

Learn all about our new ZooMAb® antibodies at SigmaAldrich.com/ZooMAb

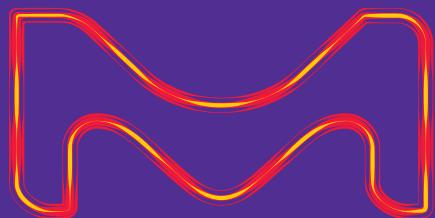


Sigma-Aldrich®

Lab & Production Materials

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