

Datasheet: MCA2391

**BATCH NUMBER 164013**

<b>Description:</b>	RAT ANTI MOUSE ER-MP58
<b>Specificity:</b>	ER-MP58
<b>Other names:</b>	MYELOID PRECURSOR ANTIGEN
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	ER-MP58
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.25 mg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			
Immunohistology - Frozen	▪			1/25 - 1/100
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide

## Stabilisers

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Carrier Free Yes

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Approx. Protein Concentrations IgG concentration 1.0 mg/ml

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Immunogen Balb/c macrophage precursor cell hybrids

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RRID AB\_931727

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Fusion Partners Cells from immunized rats were fused with cells of the Y3-Ag1.2.3 myeloma cell line.

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**Specificity** **Rat anti Mouse ER-MP58 antibody, clone ER-MP58** recognizes the murine antigen ER-MP58, which is expressed by all bone marrow-derived M-CSF- and GM-CSF-responsive myeloid blood cell precursors.

The expression of ER-MP58 remains at a high level throughout the precursor/monocyte stage and is down-regulated upon maturation into mature macrophages. The ER-MP58 antigen is used to distinguish between early myeloid-committed cells, haematopoietic progenitors cells and as a marker for macrophage development in bone marrow. ER-MP58 is suitable for the identification of myeloid haematopoietic islands in various organs, and for embryonic tissues.

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Flow Cytometry Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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## References

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14. de Bruijn, M.F. *et al.* (1996) High-level expression of the ER-MP58 antigen on mouse bone marrow hematopoietic progenitor cells marks commitment to the myeloid lineage. [Eur J Immunol. 26: 2850-8.](#)
15. Welzen-Coppens, J.M. *et al.* (2012) Abnormalities of dendritic cell precursors in the pancreas of the NOD mouse model of diabetes. [Eur J Immunol. 42: 186-94.](#)
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17. Luque-Martin, R. *et al.* (2019) Targeting Histone Deacetylases in Myeloid Cells Inhibits Their Maturation and Inflammatory Function With Limited Effects on Atherosclerosis. [Front Pharmacol. 10: 1242.](#)

<b>Storage</b>	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2391">https://www.bio-rad-antibodies.com/SDS/MCA2391</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@800</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight@800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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