



## RayBiotech, Inc.

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### Certificate of Analysis and Data Sheet

## Rat Anti-Mouse ER-MP58

With HRP-conjugated Secondary Antibody

**Catalog No.**  
DS-MB-03901

**Species**  
Mouse

**Isotype**  
IgG2a

### Preparation

**Purification:** Purified IgG prepared by affinity chromatography on Protein G

**Immunogen:** Balb/c macrophage precursor cell hybrids

### Specificity

DS-MB-03901 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 and other haematopoietic progenitors cells in the BM. The antigen has been used as a marker of murine macrophage development in the BM. ER-MP58 is suitable for the identification of myeloid haematopoietic islands in various organs, and for embryonal studies.

### Formulation

**Product Type:** Monoclonal Antibody

**Product Form:** Purified IgG - liquid

**Buffer Solution:** Phosphate buffered saline

**Preservative Stabilizers:** 0.09% Sodium Azide

### Applications

Table Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Flow Cytometry	•			
Immunohistology - Froze	•			1:25 – 1:100
Immunoprecipitation	•			

Note: Other applications are not tested yet. Optimal dilutions should be determined.

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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### Flow Cytometry

Use 10ul of the suggested working dilution to label  $10^6$  cells in 100ul.

### Storage

Store at +4°C. DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

**Shelf Life:** 12 months from date of dispatch.

### Secondary Antibody Applications

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Immunoassay (ELISA, Western blot)	.			1:5000-1:10000

### References

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3. Nikolic, T. et al. (2003) Developmental stages of myeloid dendritic cells in mouse bone marr ow. Int. Immunol.15: 515-524.
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5. Sunderkötter, C. et al. (2004) Subpopulations of mouse blood monocytes differ in maturation stage and inflammatory response. J Immunol. 172: 4410-7.
6. Chan, J. et al., (1998) Macrophage lineage cells in inflammation: characterization by colony-stimulating factor-1 (CSF-1) receptor (c-Fms), ER-MP58, and ER-MP20 (Ly-6C) expression. Bl ood. 1998 Aug 92: 1423-31.
7. Sunderkötter, C. et al. (2004) Subpopulations of mouse blood monocytes differ in maturation stage and inflammatory response. J Immunol. 172: 4410-7.
8. Wynn, A.A. et al. (2001) Role of granulocyte/macrophage colony-stimulating factor in zymoc el-induced hepatic granuloma formation. Am J Pathol. 158: 131-45.
9. Rössner, S. et al. (2005) Myeloid dendritic cell precursors generated from bone marrow sup press T cell responses via cell contact and nitric oxide production in vitro. Eur J Immunol. 35: 3 533-44.

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