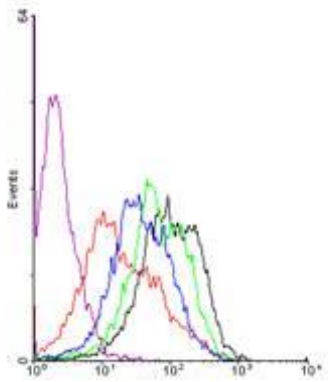
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	M-CSF-responsive cells, Mouse, clone ER-MP58		
Catalog number	HM1089-20UG		
Lot number	-	**Expiry date**	-
Volume	200 µl	**Amount**	20 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	**Concentration**	100 µg/ml
Host Species	Rat IgG2a	**Conjugate**	None
Endotoxin	N.A.	**Purification**	Protein G
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #	7			2,3,4,5,6		1		
Yes	•			•		•		
No								
N.D.		•	•		•		•	•

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



FC: Flow Cytometry with C57bl/6 BM cells. Purple represents cells only, red the control and blue, green and black HM1089 in respectively 1, 2 and 4 µg/ml.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

General Information

Description

The monoclonal antibody ER-MP58 recognizes an antigen present on all mouse macrophage colony-stimulating factor (M-CSF) responsive cells in the bone marrow, including the earliest colony-forming myeloid progenitors, as well as by the majority of other myeloid precursors. The antigen is detected on a broad development range of macrophage precursor cells to the monocytic level, but also on granulocytes. Expression is rapidly lost upon maturation beyond the monocytic stage. The antigen disappears in the course of macrophage differentiation. Furthermore the antigen is clearly different from commonly used myeloid markers as Mac-1, F4/80, and Gr-1.
The monoclonal antibody ER-MP58 is very useful for the identification of mouse myeloid hematopoietic islands in various organs, and for embryonic studies. Cells committed to the myeloid lineage can be separated from progenitor cells with other differentiation capacities by means of multiparameter cell sorting using monoclonal antibody ER-MP58 in combination with monoclonal antibody ER-MP12 (HM1084) and ER-MP-20 (HM1082).

References

1. Leenen, P et al; Murine macrophage precursor characterization II. Monoclonal antibodies against macrophage precursor antigens. Eur J Immunol 1990, *20*: 27

2. De Bruijn, M et al; High-level expression of the ER-MP58 antigen on mouse bone marrow hematopoietic progenitor cells marks commitment to the myeloid lineage. Eur J Immunol 1996, *26*: 2850
3. Chan, J et al; Macrophage lineage cells in inflammation: characterization by colony-stimulating factor-1 (CSF-1) receptor (c-Fms), ER-MP58, and ER-MP20 (Ly-6C) expression. Blood 1998, *92*: 1423
4. Nikolic, T et al; Developmental stages of myeloid dendritic cells in mouse bone marrow. Int Immunol 2003, *15*: 515
5. Sunderkötter, C et al; Subpopulations of mouse blood monocytes differ in maturation stage and inflammatory response. J Immunol 2004, *172*: 4410
6. Cook, A et al; The effect of tissue type-plasminogen activator deletion and associated fibrin(ogen) deposition on macrophage localization in peritoneal inflammation. Thromb Haemost 2006, *95*: 659
7. Goossens, P et al; Myeloid IkBa Deficiency Promotes Atherogenesis by Enhancing Leukocyte Recruitment to the Plaques. PLosOne 2011*, 6*: e22327

Storage&stability Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC	Date
Brenda Teunissen	11/11/2020

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.