

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Ly-6C, Mouse, clone ER-MP20	Expiry date	-
Catalog number	HM1082-100UG		
Lot number	-	Amount	100 µg
Volume	100 µg	Concentration	100 µg/ml
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	Conjugate	None
Host Species	Rat IgG2a	Purification	Protein G
Endotoxin	N.A.		
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
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

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.

- FC: ER-MP20 can be used for the detection of monocytes in bone marrow samples by flow cytometry.
- IA: the antibody can be used as detection antibody.
- IHC: The antigen is glutaraldehyde (0.05%) and paraformaldehyde (1%) resistant.

General Information
Description

The monoclonal antibody ER-MP20 specifically reacts with mouse macrophage precursor cells in the mid-stage of their development (late CFU-M, monoblasts and monocytes). The antigen is a 14 kD surface protein which is very similar to Ly-6C and may be analogous to human CD59. It is inducible by IFN-alpha, IFN-beta and IFN-gamma. In tissue sections, the antigen is found on macrophage precursor subpopulations. In the bone marrow and hemopoietic islands of the lymphoid organs, and in the spleen. Activated macrophages in inflammatory tissues also express the ER-MP20-related antigen.

The monoclonal antibody ER-MP20 has been raised after immunization of rats with mouse macrophage cell lines and reacts with mouse macrophage precursor cells. The monoclonal antibody also identifies activated macrophages in inflammatory tissues where the simultaneous use of the murine pan-macrophage marker BM8 (anti-F4/80) is recommended. In combination with an anti-mouse CD31/PECAM-1 antibody, ER-MP20 can be used to evaluate the cellular composition in murine bone marrow (e.g. using flow cytometric analysis). ER-MP20 also detects a wide range of endothelial cells.

References

1. de Bruijn, M et al; Distinct mouse bone marrow macrophage precursors identified by differential expression of ER-MP12 and ER-MP20 antigens. Eur J Immunol 1994, 24: 2279
2. de Bruijn, M et al; Bone marrow cellular composition in Listeria monocytogenes infected mice detected using ER-MP12 and ER-MP20 antibodies: a flow cytometric alternative to differential counting. J Immunol Methods 1998, 217: 27
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. Henkel, G et al; Commitment to the monocytic lineage occurs in the absence of the transcription factor PU.1. Blood 1999, 93: 2849
5. Manitz, M et al; Loss of S100A9 (MRP14) results in reduced interleukin-8-induced CD11b surface expression, a polarized microfilament system, and diminished responsiveness to chemoattractants in vitro. Mol Cell Biol 2003, 23: 1034

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
Brenda Teunissen

Date
12/11/2019

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