CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	MHC class I, Mouse, clone ER-HR52		
Catalog number	HM1090-100UG		
Lot number	-	**Expiry date**	-
Volume	1 ml	**Amount**	100 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 #								
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.
- IHC-F: The antigen is glutaraldehyde (0.05%) and paraformaldehyde (1%) resistant.

General Information

Description
The monoclonal antibody ER-HR52 specifically reacts with major histocompatibility complex (MHC) class I antigens of the mouse and, therefore, it is a valuable tool for studying cytotoxic T-cell interactions with class I positive antigen presenting cells. The primary immunological function of MHC molecules is to bind and present antigenic peptides on the surfaces of cells for recognition by the antigen-specific T cell receptors (TCRs) of lymphocytes. MHC class I molecules are expressed on the surfaces of most cells and are recognized by CD8-positive cytotoxic T-cells, an essential step for initiating the elimination of virally infected cells by T-cell-mediated lysis. MHC class I molecules are heterodimers composed of an alpha (44kD) and a beta (beta microglobulin, 11 kD) subunit. The first two structural domains of the alpha subunit associate to form the peptide-binding pocket.
The monoclonal antibody ER-HR52 reacts with MHC class I, an antigen that is expressed by all somatic cells at varying levels. Lymphocytes are highly positive, whereas fibroblasts and neurons show only a low level of antigen expression. ER-HR52 recognizes murine MHC class I molecules on the surface of cells of the following haplotypes: H-2Db, H-2Dw16, H-2d,p,q. Weaker reactivity is found in mice of the following haplotypes: H-2f,r,s,w17, w23,w27. MHC class I molecules of other haplotypes are not recognized by ER-MP52. There is no cross-reactivity with human MHC class I molecules.

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   12/11/2019

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