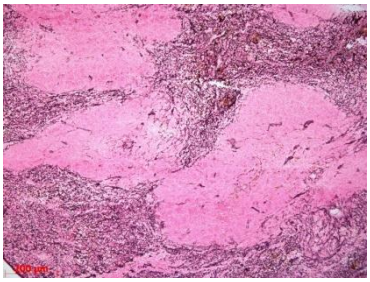
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Fibroblasts, Mouse, clone ER-TR7		
Catalog number	HM1086-100UG		
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 #	1,2	3	4-6	4				
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



IHC: Staining of mouse C57BL/6 spleen section with antibody ER-TR7 5 µg/ml (Cat. # HM1086).

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.

- F: Sections were stained using an indirect immunoperoxidase method (Ref.1).
- FC: Splenocytes were incubated with ER-TR7 for 30' (Ref.4).
- IF: Acetone or PFA fixed cells were quenched with 50mM NH4Cl for 30', blocked and permeabilized with 1.5% goat serum/0.1% saponin in PBS for 45' ate RT. Incubation of ER-TR-7 in block&perm solution for 45' at RT. Specific staining was detected with a fluorescent conjugated goatαrat-IgG (Ref.5).
- P: Formalin fixed paraffin sections were deparafined, hydrated in ethanol and stained with ER-TR7 for 30'at RT (Ref.3).
- Positive control: Spleen; Negative control: Lymphoid cells.

General Information

Description

Monoclonal antibody ER-TR7 recognizes with an intracellular component of mouse fibroblasts. Fibroblasts are the least specialized cells in the connective-tissue family. They are dispersed in connective tissue throughout the body, where they secrete a nonrigid extracellular matrix (ECM) that is rich in type I and/or type III collagen. Connective tissue consists of glycosaminoglycans, proteoglycans and glycoproteins through which various fibres run. These fibres can be collagenous, elastic or reticular. Reticular fibres are composed from the family of collagen proteins and give tensile strength. These fibres are made by reticular fibroblasts. The activation of fibroblasts by inflammatory stimuli results in their migration, proliferation and deposition of extracellular matrix components, important features involved in both wound healing and fibrosis.
The ER-TR7 antigen is a ubiquitous component of stromal (interstitial) matrix cartilage and of at least some basement membrane zones. The antigen detected is not a basement membrane component, nor any major collagen type or fibronectin. The antigen detected has a wider tissue distribution than reticulin. ER-TR7 detects an intracellular component of fibroblasts. Since ER-TR7 does not react with purified laminin, collagen types I-V, fibronectin, heparin sulfate proteoglycan, entactin or nidogen, it detects a hitherto uncharacterized antigen.
The monoclonal antibody ER-TR7 can be used to study the micro-anatomy of various organs. ER-TR7 outlines the various compartments of peripheral lymphoid organs by characteristic labeling patterns (no such compartments are

found in central lymphoid organs). Furthermore ER-TR7 delineates various types of connective tissue compartments in nonlymphoid organs.
The antibody ER-TR7 detects reticular fibroblasts, which constitute the cellular framework of lymphoid and nonlymphoid organs and their products. ER-TR7 is useful to clearly delineated the follicles, periarteriolar lymphoid sheath and marginal zone; the major white pulp compartments. Furthermore in lymph nodes, the capsule, sinuses, follicles, paracortex and medullary cords are clearly delineated.

Immunogen Mouse thymic stromal cells

Cross reactivity Human fibroblasts: Yes

References

1. Vliet van, E et al; Monoclonal antibodies to stromal cell types of the mouse thymus. Eur J Immunol 1984, 14: 524
2. Vliet van, E et al; Reticular fibroblasts in peripheral lymphoid organs identified by a monoclonal antibody. J Histochem Cytochem 1986, 34: 883
3. Kalled, S et al; Anti-CD40 ligand antibody treatment of SNF 1 mice with established nephritits: preservation of kidney function. J Immunol 1998, 120: 2158
4. Nolte, M et al; A conduit system distributes chemokines and small blood-borne molecules through the splenic white pulp. J Exp Med 2003, 3: 505
5. Svensson, M et al; Stromal cells direct local differentiation of regulatory dendritic cells. Immunity 2004, 21: 505
6. Alba, R et al; Biodistribution and retargeting of FX-binding ablated adenovirus serotype 5 vectors. Blood 2010 (Epub july 7).

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.