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Monoclonal Antibody To Mouse (Human/Porcine) Reticular Fibroblasts and Reticular Fibres

Marker For Connective Tissue Framework

Monoclonal antibody ER-TR7 detects an antigen present in, and produced by, reticular fibroblasts. This antigen is most likely distinct from laminin, fibronectin, collagen types I-IV, heparan sulfate proteoglycan, entactin, and nidogen. The antibody is useful to stain the microanatomy of various organs, in particular the connective tissue framework in lymphoid organs. The antibody also stains subendothelial deposits in the plaque area of atherosclerotic plaques.

Product number: T-2109
Clone: ER-TR7
Lot: 08PO0811
TECHNICAL AND ANALYTICAL CHARACTERISTICS:

Host species, subclass:	Rat IgG2a
Quantity:	200µg
Format:	Affinity purified, lyophilized
	Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA) as a stabilizer and 0.09% sodium azide as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C
	Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.
Applications:	Tested for immunohistochemistry (IHC); has been described to work in FACS.
	Approximate working dilution for IHC: Frozen sections: 1µg/ml (1:400) mouse tissue 4µg/ml (1:100) human/porcine tissue Paraffin sections: does not react on routinely processed paraffin sections.
	Optimal dilutions should be determined by the end user.
	Suggested positive control: Mouse spleen.
	Please see **www.bma.ch** for protocols and general information.
Immunogen:	murine thymic reticulum
Antigen, epitope:	The antigen has not been not fully characterized The recognized epitope may be part of reticulin.

Antigen distribution:

Isolated cells: The antigen is found in the cytoplasm of fibroblasts and fibroblast cell lines.

Tissue sections In all organs tested so far, the antigen is expressed in connective tissues which form a supporting network between parenchymal cells (see table below). Thus , the supportive mesenchymal structures of larger vessels can be studied. In spleen, a very clear delineation of red and white pulp is obtained. Capsule, sinuses, follicules, paracortex and medullary cords are also clearly delineated in lymph nodes.

Reactivity of ER-TR7 with various non-lymphoid organs of the mouse

Organ	Reactivity with
Submadibular salivary gland	Interstitial CT[1)2)] between acini
Stomach	Lamina propria, CT of muscularis, serosa
Small intestine	Lamina propria, CT of muscularis, serosa
Pancreas	Interstitial CT between acini
Liver	Lining of liver cords
Skin	Dermis
Ear	Extracellular matrix of cartilage, dermis
Striated muscle	Interstitial CT between muscle fibres
Cardiac muscle	Interstitial CT between muscle fibres
Tendon	Fibres
Ovary	Connective tissue stroma, tunica albuginea
Testis	Interstitial CT between seminiferous tubuli
Kidney	Glomeruli and interstitial CT between tubuli
Brain	Blood vessels, meninges

[1)] CT= connective tissue
[2)] In tissues tested ER-TR7 reacts with blood vessel walls and capsules

Specificity:

Mouse: Reticular fibroblasts, reticular fibres

Other species: human and pig positive, other species not tested.

Selected references

Van Vlieth, E., M. Melis, J.M.Foidart, W. van Ewijk: Reticular fibroblasts in peripheral lymphoid organs identified by a monoclonal antibody, J Histochem Cytochem 34: 883-890 (1986)

For *in vitro* research only. Caution: this product contains sodium azide, a poisonous and hazardous substance.