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Biotinylated Monoclonal Antibody To Mouse Marginal Zone Macrophages (SIGN-R1)

Subpopulation Of Mature Tissue Macrophages In Spleen And Lymph Node

Monoclonal antibody ER-TR9 is a very useful marker for the identification of macrophage subpopulations present in the marginal zone of spleen and lymph node medulla. In combination with MOMA-1 (product T-2011), the murine metallophilic macrophage marker, a detailed characterization of murine splenic marginal zone macrophages is obtained. ER-TR9 is also useful when studying phagocytosis of polysaccharides since the antibody selectively inhibits uptake of these glycans by macrophages. The antigen recognized by ER-TR9 has recently been shown to be the murine analogue of the human DC-SIGN (Dendritic Cell - Specific ICAM-3 Grabbing Non-Integrin), named SIGN-R1.

Product Number:	T-2024
Clone:	ER-TR9
Host species, isotype:	Rat IgM
Quantity:	150µg
Format:	Affinity purified, biotinylated, lyophilized
	Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.3mg/ml IgM, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA) as stabilizer and 0.1% sodium azide as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C
	Stock solution or aliquots thereof: 6 months at 4°-8°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: 1.5µg/ml (1:200) Paraffin sections: does not react on routinely processed paraffin sections. Optimal dilutions should be determined by the end user.
	Suggested positive control: Mouse spleen.
Immunogen:	Thymus cells
Antigen, epitope	The antigen is a glutaraldehyde (0.05%) resistant protein expressed in the cytoplasm and on the cell surface.

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Antigen distribution:

Isolated Cells: The antigen is found on a subpopulation of phagocytic macrophages isolated from the spleen and showing acid phosphatase and moderate non-specific esterase activity. These phagocytes selectively ingest neutral polysaccharides such as Ficoll.

Tissue Sections: Subpopulation of resident macrophages in the splenic marginal zone which are in the proximity of a certain B cell subpopulation (μ+, d-). It is also found on a subpopulation of macrophages localized in the medullary sinuses and trabecular sinuses of lymph nodes. Furthermore, macrophage subpopulations in other organs, such as some connective tissue macrophages in the dermis, may also show ER-TR9 antigen expression.

Specificity:

Mouse: Subpopulation of mature tissue macrophages present in the splenic marginal zone, lymph node medullary and trabecular sinuses.

Other: unknown

Selected references

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