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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.

This antibody was produced serum-free, without fetal calf serum.

Product number: T-2024
Clone: ER-TR9
Lot: 05PB1435

TECHNICAL AND ANALYTICAL CHARACTERISTICS:
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 0.05% (v/v) Kathon CG as a
preservative.

Stability: Original vial: 1 year at 4° - 8°C. Minimize repeated thawing and
freezing of the stock solution.

Applications: Each lot of this antibody has been tested and validated for
immunohistochemistry (IHC); the antibody has been described to
work in FACS.
Approximate working dilution for IHC:
Frozen sections: 0.75µg/ml (1:400)
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: Thymus cells
Antigen, epitope The antigen is a glutaraldehyde (0.05%) resistant protein
expressed in the cytoplasm and on the cell surface.
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 ($\mu^+$, $d$-). 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**


For *in vitro* research only.