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Product datasheet

Biotin Anti-CD209 antibody [ER-TR9] ab51819

5 References

Overview

Product name	Biotin Anti-CD209 antibody [ER-TR9]
Description	Biotin Rat monoclonal [ER-TR9] to CD209
Host species	Rat
Conjugation	Biotin
Specificity	Reacts with subpopulation of mature tissue macrophages present in the splenic marginal zone, lymph node medullary and trabecular sinuses.
Tested applications	**Suitable for:** IHC-Fr **Unsuitable for:** IHC-P
Species reactivity	**Reacts with:** Mouse
Immunogen	Tissue, cells or virus corresponding to Mouse CD209.
Epitope	The antigen is a glutaraldehyde (0.05%) resistant protein expressed in the cytoplasm and on the cell surface.
Positive control	Mouse spleen.
General notes	The antigen recognized by ER-TR9 has recently been shown to be the murine analogue of the human DC SIGN (Dendritic Cell - Specific ICAM3 Grabbing Non Integrin), named SIGN R1. 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. 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. ER-TR9 is also useful when studying phagocytosis of polysaccharides since the antibody selectively inhibits uptake of these glycans by macrophages. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or

contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.05% KATHON™ CG/ICP Constituents: 0.5% BSA, 99% PBS
Purity	Purified IgM
Primary antibody notes	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. ER-TR9 is also useful when studying phagocytosis of polysaccharides since the antibody selectively inhibits uptake of these glycans by macrophages.
Clonality	Monoclonal
Clone number	ER-TR9
Isotype	IgM

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab51819 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr		Use at an assay dependent concentration.

Application notes Is unsuitable for IHC-P.

Target

Relevance	SIGN R1 is a specific marker for the identification of macrophage subpopulations present in the marginal zone of spleen (the so-called marginal zone macrophages (MZM)), in the lymph node medulla, and in some strains, in the peritoneal cavity. MZM of the spleen are involved in the clearance of polysaccharides. Mouse SIGN R1 is a C type lectin, like DC SIGN which is expressed on Human dendritic cells (DCs). However, Mmouse SIGN R1 itself is not expressed on DCs. SIGN R1 exists in an aggregated form, resistant to dissociation into monomers upon boiling in SDS under reducing conditions. SIGN R1 mediates the uptake of encapsulated organisms and may be an important mediator for the uptake of microbes in both spleen and lymph node, particularly through the recognition of microbial polysaccharides.
Cellular localization	Single-pass type II membrane protein

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