



Code No.KT015

For research use only

Anti Rabbit Macrophage / Monocyte Monoclonal Antibody (Clone No. RbM2)

This anti-rabbit macrophage monoclonal antibody, RbM2, was produced by using thiogllycate-elicited rabbit peritoneal macrophages as immunogen. Immunoelectoron microscopy demonstrates that RbM2 reacts with lysosomes of rabbit macrophages and monocytes. This selective reactivity was confirmed in various experiments by endocytosis. In contrast, dendritic cells, such as follicular dendritic cells (FDCs) of lymphoid follicles, interdigitating cells(IDCs) of lymphoid T zone, or epidermal Langerhan's cells, are not reactive with this antibody.

The antigen recognized by RbM2 is a lysosomal membrane protein with 50,000 molecular weight.

Thus, this antibody is very useful for not only in discriminating monocyte / macrophages from various cell populations but also in identifying lysosomes and their related structures in macrophages.

Package Size	50 μ g (200 μ L / vial)	
Format	Mouse monoclonal antibody 0.25mg/mL	
Buffer	Block Ace as a stabilizer, containing 0.1% Proclin as a bacteriostat	
Storage	Store below -20° C	
	Once thawed, store at 4°C. Repeated freeze-thaw cycles should be avoided	
Clone No.	RbM2	
Subclass	IgG1	
Purification method	The splenic lymphocytes from BALB/c mouse, immunized with thioglycate-elicited rabbit peritoneal macrophages, were fused to myeloma NS-1 cells. The screening of the hybridoma cells was performed on cryostat sections of rabbit spleens. The hybridoma cell line (RbM2) with positive reaction was grown in ascitic fluid of BALB/c mouse, from which the antibody was purified by Protein G affinity chromatography.	

Working dilution for immunohistochemistry: 10μ g/mL on frozen sections, not applicable for paraffin sections.



Rabbit Liver (frozen section): Kupffer cells are positively stained. Takeya M., Second Department of Pathology, Kumamoto University School of Medicine, Kumamoto, Japan





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[Specificity]

Organ	Reaction		
	Positive	negative	
Thymus	Macrophages in cortex	Epithelial cells	
	Macrophages in medulla	Dendritic cells	
Spleen	Red pulp macrophages	IDCs in PALS	
		Marginal zone macrophages	
		FDCs in the germinal centre	
Lymph	TB macrophages in follicles	IDCs in paracortical areas	
nodes	Macrophagesim sinuses macrophage	FDCs in the germinal center	
Lungs	Alveolar macrophages		
Liver	Kupffer cells	Sinusodal endothelia	
		Perisinusoidal fat-storing cells	
		Parenchymal cells	
Skin	Dermal macrophages	Langerhans cells	
		Epidermal dendritic cells	
Brain	Macrophages in the subarachnoid space	Microglial cells	
others	Monocytes	Granulocytes	
	Peritoneal macrophages	Lymphocytes	
	Macrophages in the milky spot of the	Erythrocytes	
	omentum	Polymorphonuclear cells	
		Neuronal cells	
		Muscle cells	

PALS=periarteriolar lymphatic sheath TB=tingible body IDCs=interdigitating cells FDCs=follicular dendritic cells

[Reference]

- 1 Shimokawa Y., Takeya M., Miyauchi Y., Takahashi K. (1990): A monoclonal antibody, RbM2, specific for a lysosomal membrane antigen of rabbit monocyte/macrophages. *Immunol.* 70: 513-519
- 2 Ruan Y., Takahashi K., Naito M. (1995): Immunohistochemical detection of macrophage-derived foam cells and macrophage clony-stimulating factor in pulmonary atherogenesis of cholesterol-fed rabbit. *Pathol Int.* 45(3): 185-195
- 3 Yoshimura N., Arima S., Nakayama M., Sato T., Takahashi K.(1994): Renal impairment and intraglomerular mononuclear phagocytes in choresterol-fed rabbits. *Nephron*. 68(4): 473-480

