

**Anti Human Macrophage Scavenger Receptor A (MSR- A:CD204)
Monoclonal Antibody (Clone No. SRA-E5)**

Macrophage scavenger receptor (MSR-A: CD204) was identified in the search for the receptor molecules that are implicated in the pathological deposition of cholesterol during atherogenesis through receptor-mediated uptake of modified low density lipoproteins (LDL).

MSR-As possess a wide range of ligand-binding specificities and recognize a variety of molecules such as modified LDL including acetylated LDL, oxidized LDL, advanced glycation end products (AGE), polyribonucleotides such as poly G and poly I and bacterial surface lipids including lipopolysaccharide and lipoteicoic acid.

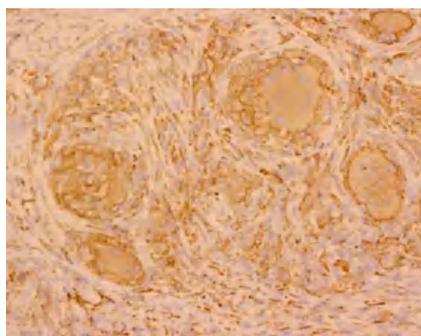
This antibody was produced from the mouse immunized with recombinant protein of human type I MSR-A, and has been proved to be useful for the immunoblotting and immunohistochemistry.

This antibody is useful tools for the study of MSR in atherogenesis and various other pathological conditions in humans and animal species.

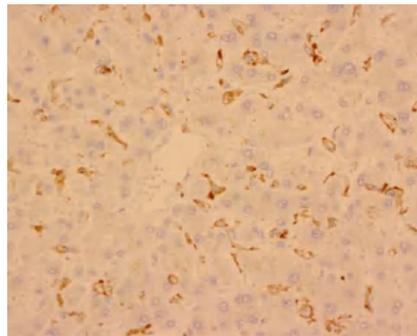
Package Size	50 μ g (200 μ l / vial)
Format	Mouse monoclonal antibody 0.25mg/ml
Buffer	Block Ace as a stabilizer, containing 0.1% Proclin as a bacteriostat
Storage	Store below -20°C
Clone No.	SRA-E5
Subclass	IgG1
Purification method	The spleen cells from mouse, immunized with recombinant protein of human type I SR-A, were fused with mouse NS-1 myeloma cells. The hybridoma cell line 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: 10 μ g/ml , for immunoblotting : 2 μ g/ml

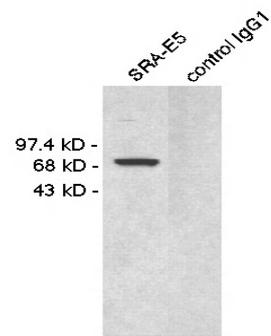
Antigen retrieval (microwave 10 min, 0.01M citrate buffer, ph2.0) is recommended for paraffin sections.



Skin Sarcoidosis (paraffin section)
Epithelioid cells and multi-nucleated giant cells in granulomas and surrounding macrophages are positive.
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Human liver (paraffin section)
Kupffer cells are positively stained.



Western blotting
A single band at 72kD is observed. DTT treated.
(sample : lysate of THP-1 cells, a human histiocytic cell line)

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【Specificity】

Organ	Reaction		Organ	Reaction	
	Positive	Negative		Positive	Negative
Heart	Intramuscular M ϕ (+-)		Trachea	Mucosal M ϕ (+-)	
Lung	Alveolar M ϕ (+) M ϕ in alveolar septa (+-)		Esophagus	Interstitial M ϕ (+-)	
Liver	Kupffer cells (+) M ϕ in portal triads(+)		Stomach	M ϕ in lamina propria(+) M ϕ in striated muscle(+/-)	
Kidney	Interstitial M ϕ (+)		Small and large intestines	M ϕ in lamina propria(+) M ϕ in striated muscle(+/-)	
Spleen	Red pulp M ϕ (+)	Interdigitating cells	Skin	Dermal M ϕ (+)	Langerhans cells
Thymus	Interlobular M ϕ (+)		Brain (cerebrum and cerebellum)	Perivascular M ϕ (Mato cells) (+)	
Lymph nodes	Sinus M ϕ (+)	Tingible body M ϕ Interdigitating cells	Testes	Interstitial M ϕ (+)	
Pancreas	Interlobular M ϕ (+)		Uterus	Interstitial M ϕ (+)	
Salivary gland	Interlobular M ϕ (+)		Ovaries	Interstitial M ϕ (+)	
Thyroid	Interfollicular M ϕ (+-)		Placenta	Hofbauer cells (+)	
Parathyroid	Interlobular M ϕ (+-)		Bone marrow	M ϕ (+)	Myeloid precursor cells
Adrenals	Interstitial M ϕ (+)		Blood monocyte	3 days in culture (+)	Freshly isolated
Urinary bladder	Interstitial M ϕ (+-)				
Prostate	Interstitial M ϕ (+-)				

M ϕ : macrophage 、 (+): most cells were positive; (+-): about 10-50% of cells were positive

【Reference】

1. Takeya M., Tomokiyo R., Jinnouchi K., Sakaguchi H., et al: Macrophage Scavenger Receptors: Structure, Function and Tissue Distribution: Acta Histochem. Cytochem. 32(1):47-51,1999
2. Tomokiyo R., Jinnouchi K., Honda M., Wada Y., Hanada N., Hiraoka T., Suzuki H., Kodama T., Takahashi K., Takeya M.: Production, characterization, and interspecies reactivities of monoclonal antibodies against human class A macrophage scavenger receptors: Atherosclerosis, 2001, in press.
3. Takeya M., Tomokiyo R., Jinnouchi K. Honda M. et al: CD204: Macrophage scavenger receptor, a new differentiation marker for macrophages: part 9 Myeloid Cells, New CD Antigens, Leucocyte Typing VII, Oxford Univ. Press, 2001, in press.

Supplier

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