Trans Genic Inc.

Code No.KT022

For research use only

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.

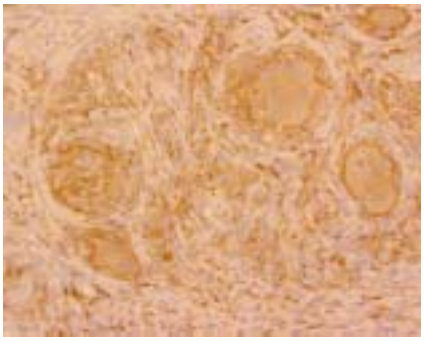
This antidody was produced from the mouse immunized with recombinant protein of human type I MSR-A ,and has been proved to be useful for the immunoblotting and immunohistochemistry.

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

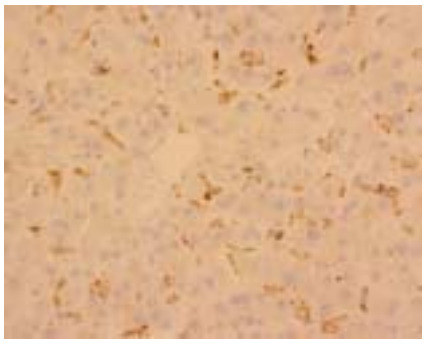
Package Size	50 μg　(200 μl / vial)
Format	Mouse monoclonal antibody 0.25mg/ml
Buffer	Block Ace as a stabilizer, containing 0.1% Proclin as a bacteriostat
Storage	Store below -20℃
Clone No.	SRA-E5
Subclass	IgG1
Purification method	The spleen cells from mouse, immunized with recombinant protein of human 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 μg/ml , for immunoblotting : 2 μg/ml

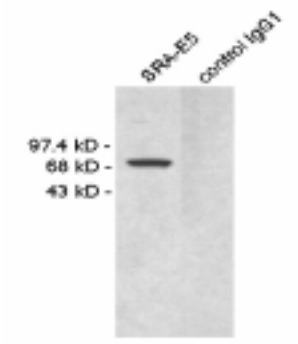
Antigen retrieval (microwave 10 min , 0.01M citrate buffer, ph2.0) is recommended for paraffin sections.



Skin Sarcoidosis (paraffin section)
Epithelioid cells and multi-nucleated giant cells in granulomas and surrounding macrophages are positive.
Takeya M., Second Department of Pathology, Kumamoto University School of Medicine, Kumamoto, Japan



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)

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

【Specificity】

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

Mφ : 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.

Manufacturer

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