

Anti-MARCO Antibody [PSH04-31]

HA722114



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 53 kDa
Clone number:	PSH04-31

Description: Macrophage receptor with collagenous structure (MARCO) is a protein that in humans is encoded by the MARCO gene. MARCO is a class A scavenger receptor that is found on particular subsets of macrophages. Scavenger receptors are pattern recognition receptors (PRRs) found most commonly on immune cells. Their defining feature is that they bind to polyanions and modified forms of a type of cholesterol called low-density lipoprotein (LDL). MARCO is able to bind and phagocytose these ligands and pathogen-associated molecular patterns (PAMPs), leading to the clearance of pathogens and cell signaling events that lead to inflammation. As part of the innate immune system, MARCO clears, or scavenges, pathogens, which leads to inflammatory responses. The scavenger receptor cysteine-rich (SRCR) domain at the end of the extracellular side of MARCO binds ligands to activate the subsequent immune responses. MARCO expression on macrophages has been associated with tumor development and also with Alzheimer's disease, via decreased responses of cells when ligands bind to MARCO.

Immunogen: Synthetic peptide within human MARCO aa 401-450 / 520.

Positive control: Human liver tissue lysate, human lung tissue lysate, human liver tissue, human spleen tissue, mouse spleen tissue.

Subcellular location: Cell membrane.

Database links: SwissProt: Q9UEW3 Human | Q60754 Mouse

Recommended Dilutions:

WB	1:1,000-1:2,000
IHC-P	1:1,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

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Images

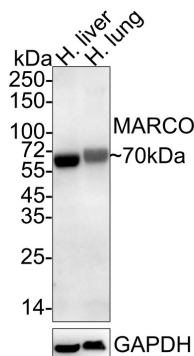


Fig1: Western blot analysis of MARCO on different lysates with Rabbit anti-MARCO antibody (HA722114) at 1/2,000 dilution.

Lane 1: Human liver tissue lysate

Lane 2: Human lung tissue lysate

Lysates/proteins at 40 µg/Lane.

Predicted band size: 53 kDa

Observed band size: 70 kDa

Exposure time: 3 minutes; ECL: K1802;

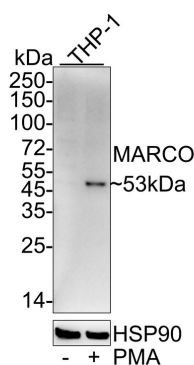
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA722114) at 1/2,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Fig2: Western blot analysis of MARCO on different lysates with Rabbit anti-MARCO antibody (HA722114) at 1/1,000 dilution.

Lane 1: THP-1 cell lysate

Lane 2: THP-1 treated with 50ng/mL PMA for 72 hours cell lysate



Lysates/proteins at 30 µg/Lane.

Predicted band size: 53 kDa

Observed band size: 53 kDa

Exposure time: 3 minutes; ECL: K1802;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA722114) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

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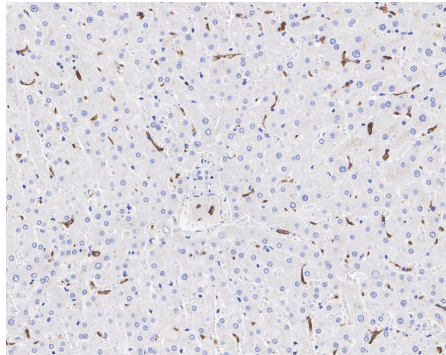


Fig3: Immunohistochemical analysis of paraffin-embedded human liver tissue with Rabbit anti-MARCO antibody (HA722114) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA722114) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

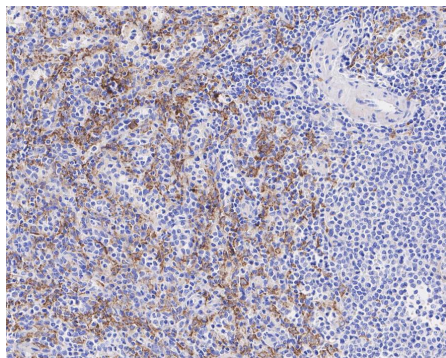


Fig4: Immunohistochemical analysis of paraffin-embedded human spleen tissue with Rabbit anti-MARCO antibody (HA722114) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA722114) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

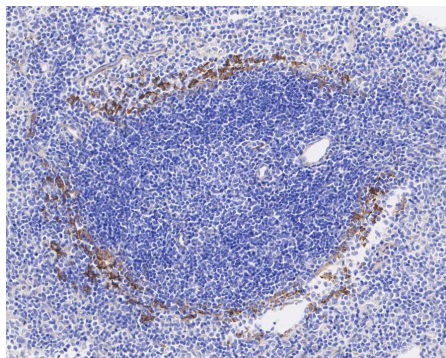


Fig5: Immunohistochemical analysis of paraffin-embedded mouse spleen tissue with Rabbit anti-MARCO antibody (HA722114) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA722114) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Dong Q et al. MARCO is a potential prognostic and immunotherapy biomarker. *Int Immunopharmacol.* 2023 Mar
2. Yang YS et al. Superenhancer drives a tumor-specific splicing variant of MARCO to promote triple-negative breast cancer progression. *Proc Natl Acad Sci U S A.* 2022 Nov

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