Anti-CD163 Antibody

ER1804-03

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 125 kDa, observed band size: 150 kDa.

Description: CD163, also designated M130, is a macrophage-associated antigen that is a member of the scavenger receptor cysteine-rich (SRCR) superfamily. It is highly expressed on macrogphages and to a lesser extent on monocytes. The acute phase-regulated and signal-inducing macrophage protein, CD163, is a receptor that scavenges hemoglobin by mediating endocytosis of haptoglobin-hemoglobin complexes. CD163 binds only haptoglobin and hemoglobin in complex, which indicates the exposure of a receptor-binding neoepitope. The receptor-ligand interaction is calcium-dependent and of high affinity. The existence of several CD163 isoforms, which differ in the structure of their cytoplasmic domains and putative phosphorylation sites, suggests that these isoforms also differ in their signaling mechanism. The gene which encodes CD163 maps to human chromosome 12p13.31.

Immunogen: Recombinant protein within Human aa 22-161 / 1,156.

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

Subcellular location: Secreted, Cell membrane.

Database links: SwissProt: Q86VB7 Human | Q2VLH6 Mouse | A0A8I5ZQF0 Rat

Recommended Dilutions:

WB	1:500-1:1,000
IHC-P	1:50-1:600

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

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

Purity: Immunogen affinity purified.

Images

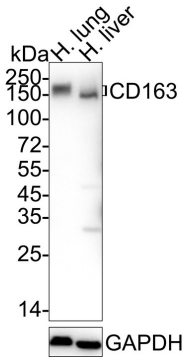

Fig1: Western blot analysis of CD163 on different lysates with Rabbit anti-CD163 antibody (ER1804-03) at 1/1,000 dilution.

Lane 1: Human lung tissue lysate
Lane 2: Human liver tissue lysate

Lysates/proteins at 40 µg/Lane.

Predicted band size: 125 kDa
Observed band size: 150-170 kDa

Exposure time: 10 seconds; ECL: K1801;

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 (ER1804-03) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

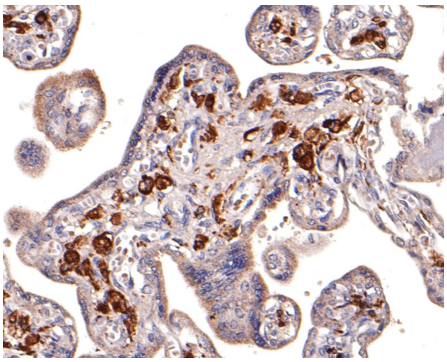

Fig2: Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-CD163 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the antibody (ER1804-03) at 1/200 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. Counter stained with hematoxylin and mounted with DPX.

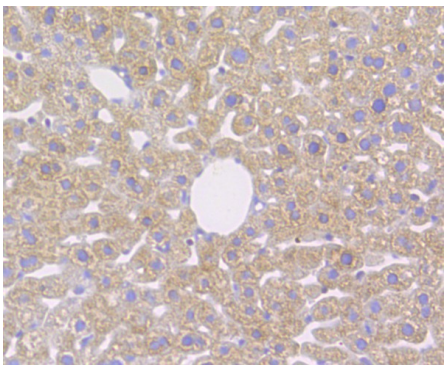

Fig3: Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-CD163 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the antibody (ER1804-03) at 1/200 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. Counter stained with hematoxylin and mounted with DPX..

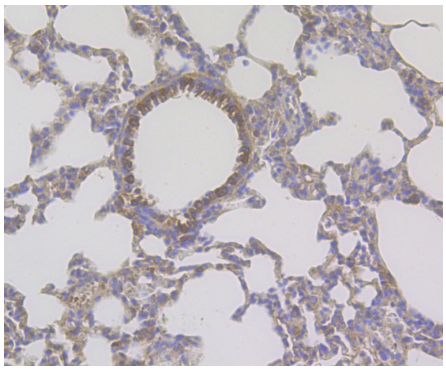

Fig4: Immunohistochemical analysis of paraffin-embedded rat lung tissue using anti-CD163 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the antibody (ER1804-03) at 1/50 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. Counter stained with hematoxylin and mounted with DPX.

Background References

1. Sato Y et al. The PD-1/PD-L1 axis may be aberrantly activated in occupational cholangiocarcinoma. Pathol Int 67(3):163-170 (2017).
2. Chen H et al. An Agonist of the Protective Factor SIRT1 Improves Functional Recovery and Promotes Neuronal Survival by Attenuating Inflammation after Spinal Cord Injury. J Neurosci 37:2916-2930 (2017).