Anti-CD36 Antibody [JJ2005]

ET1701-24

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell, IF-Tissue, IHC-P, IP
Molecular Wt:	Predicted band size: 53 kDa
Clone number:	JJ2005

Description: CD36 (cluster of differentiation 36), also known as platelet glycoprotein 4, fatty acid translocase (FAT), scavenger receptor class B member 3 (SCARB3), and glycoproteins 88 (GP88), IIIb (GPIIIB), or IV (GPIV) is a protein that in humans is encoded by the CD36 gene. The CD36 antigen is an integral membrane protein found on the surface of many cell types in vertebrate animals. It imports fatty acids inside cells and is a member of the class B scavenger receptor family of cell surface proteins. CD36 binds many ligands including collagen, thrombospondin, erythrocytes parasitized with Plasmodium falciparum, oxidized low density lipoprotein, native lipoproteins, oxidized phospholipids, and long-chain fatty acids. Work in genetically modified rodents suggest a role for CD36 in fatty acid metabolism, heart disease, taste, and dietary fat processing in the intestine. It may be involved in glucose intolerance, atherosclerosis, arterial hypertension, diabetes, cardiomyopathy, Alzheimer's disease and various cancers, mostly of epithelial origin (breast, prostate, ovary, and colon) and also for hepatic carcinoma and gliomas.

Immunogen: Synthetic peptide within Human CD36 aa 360-373 / 472.

Positive control: Human heart tissue lysate, Mouse heart tissue lysate, THP-1, THP-1 cells treated with 100ng/mL PMA for 72 hours, human spleen tissue, human liver tissue, mouse spleen tissue, mouse heart tissue, mouse lung tissue, mouse stomach tissue.

Subcellular location: Cell membrane, Membrane raft, Golgi apparatus, Apical cell membrane.

Database links: SwissProt: P16671 Human | Q08857 Mouse | Q07969 Rat

Recommended Dilutions:

WB	1:2,000
IF-Cell	1:100-1:200
IF-Tissue	1:50-1:200
IHC-P	1:50-1:2,000
IP	Use at an assay dependent concentration.

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% 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: Protein A affinity purified.

Images

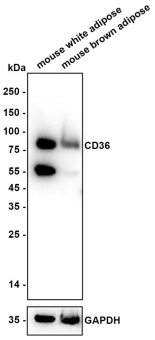

Fig1: Western blot analysis of CD36 on different lysates with Rabbit anti-CD36 antibody (ET1701-24) at 1/2,000 dilution.

Lane 1: Mouse white adipose tissue lysate
Lane 2: Mouse brown adipose tissue lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 53 kDa
Observed band size: 80 kDa

Exposure time: 8 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 (ET1701-24) at 1/2,000 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.

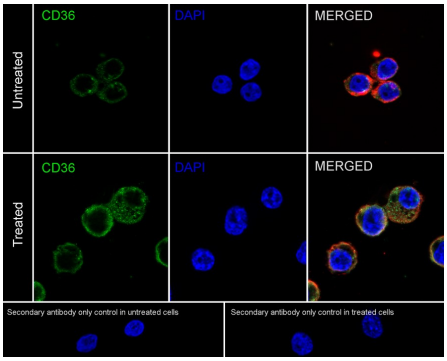

Fig2: Immunocytochemistry analysis of THP-1 cells treated with 100ng/mL PMA for 72 hours labeling CD36 with Rabbit anti-CD36 antibody (ET1701-24) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-CD36 antibody (ET1701-24) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

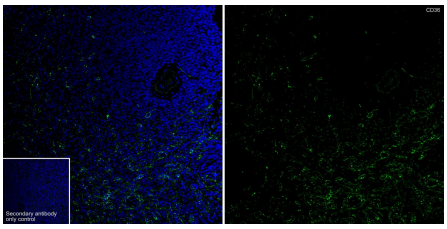

Fig3: Application: IF-Tissue

Species: Human

Site: spleen

Sample: Paraffin-embedded section

Antibody concentration: 1/50

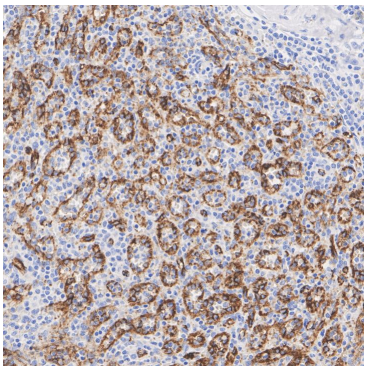

Fig4: Immunohistochemical analysis of paraffin-embedded human spleen tissue with Rabbit anti-CD36 antibody (ET1701-24) at 1/2,000 dilution.

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 ddH_2O and PBS, and then probed with the primary antibody (ET1701-24) at 1/2,000 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.

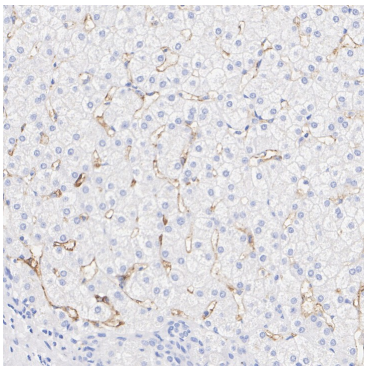

Fig5: Immunohistochemical analysis of paraffin-embedded human liver tissue with Rabbit anti-CD36 antibody (ET1701-24) at 1/2,000 dilution.

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 ddH_2O and PBS, and then probed with the primary antibody (ET1701-24) at 1/2,000 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.

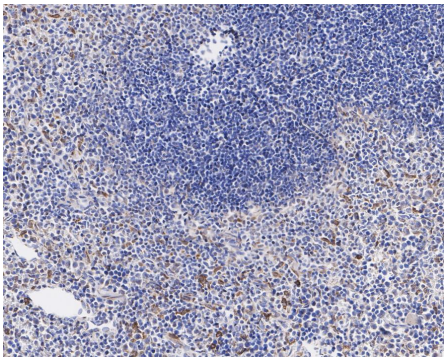

Fig6: Immunohistochemical analysis of paraffin-embedded mouse spleen tissue with Rabbit anti-CD36 antibody (ET1701-24) at 1/200 dilution.

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 ddH_2O and PBS, and then probed with the primary antibody (ET1701-24) at 1/200 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.

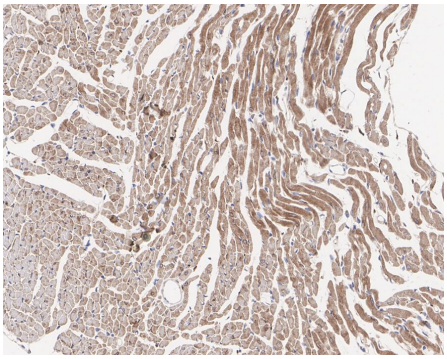

Fig7: Immunohistochemical analysis of paraffin-embedded mouse heart tissue with Rabbit anti-CD36 antibody (ET1701-24) at 1/200 dilution.

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 ddH_2O and PBS, and then probed with the primary antibody (ET1701-24) at 1/200 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.

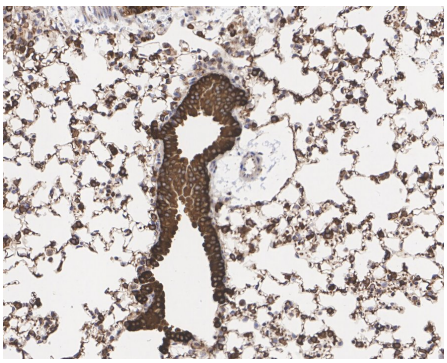

Fig8: Immunohistochemical analysis of paraffin-embedded mouse lung tissue with Rabbit anti-CD36 antibody (ET1701-24) at 1/50 dilution.

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 ddH_2O and PBS, and then probed with the primary antibody (ET1701-24) at 1/50 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.

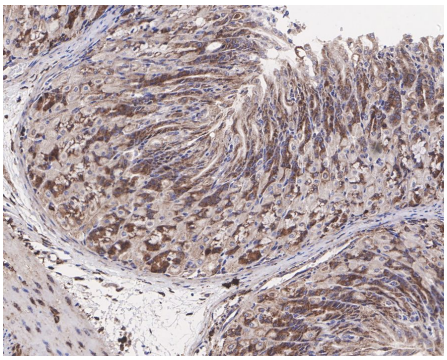

Fig9: Immunohistochemical analysis of paraffin-embedded mouse stomach tissue with Rabbit anti-CD36 antibody (ET1701-24) at 1/50 dilution.

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 ddH_2O and PBS, and then probed with the primary antibody (ET1701-24) at 1/50 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.

Background References

1. Shu H et al. The role of CD36 in cardiovascular disease. Cardiovasc Res. 2022 Jan
2. Ma X et al. CD36-mediated ferroptosis dampens intratumoral CD8(+) T cell effector function and impairs their antitumor ability. Cell Metab. 2021 May