Anti-LAMP2a Antibody [SA46-01]

ET1601-24

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IP
Molecular Wt:	Predicted band size: 45 kDa
Clone number:	SA46-01

Description: Lysosome-associated membrane protein 2 (LAMP2), also known as CD107b (Cluster of Differentiation 107b) and Mac-3, is a human gene. Its protein, LAMP2, is one of the lysosome-associated membrane glycoproteins. The protein encoded by this gene is a member of a family of membrane glycoproteins. This glycoprotein provides selectins with carbohydrate ligands. It may play a role in tumor cell metastasis. It may also function in the protection, maintenance, and adhesion of the lysosome. Alternative splicing of the gene produces three variants - LAMP-2A, LAMP-2B and LAMP-2C. LAMP-2A is the receptor for chaperone-mediated autophagy. Recently it has been determined that antibodies against LAMP-2 account for a fraction of patients who get a serious kidney disease termed focal necrotizing glomerulonephritis. LAMP-2B is associated with Danon disease.

Immunogen: Synthetic peptide within Human LAMP2a aa 361-410 / 410.

Positive control: SK-MEL-28 cell lysate, HeLa cell lysate, JAR cell lysate, U-937 cell lysate, RAW264.7 cell lysate, NIH/3T3 cell lysate, PC-12 cell lysate, mouse liver tissue lysate, rat liver tissue lysate, rat lung tissue lysate, human kidney tissue, human liver tissue, human pancreas tissue, mouse kidney tissue, mouse placenta tissue, mouse pancreas tissue, rat kidney tissue.

Subcellular location: Cell membrane, Endosome membrane, Lysosome membrane

Database links: SwissProt: P13473 Human | P17047 Mouse | P17046 Rat

Recommended Dilutions:

WB	1:5,000
IHC-P	1:50-1:500
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: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

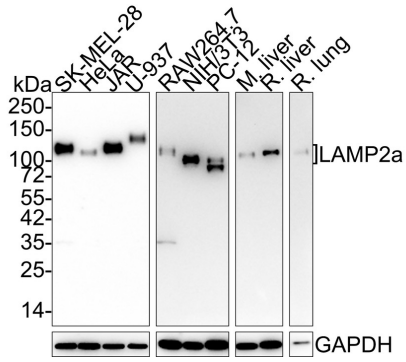

Fig1: Western blot analysis of LAMP2a on different lysates with Rabbit anti-LAMP2a antibody (ET1601-24) at 1/5,000 dilution.

Lane 1: SK-MEL-28 cell lysate (20 µg/Lane)
Lane 2: HeLa cell lysate (20 µg/Lane)
Lane 3: JAR cell lysate (20 µg/Lane)
Lane 4: U-937 cell lysate (20 µg/Lane)
Lane 5: RAW264.7 cell lysate (15 µg/Lane)
Lane 6: NIH/3T3 cell lysate (15 µg/Lane)
Lane 7: PC-12 cell lysate (15 µg/Lane)
Lane 8: Mouse liver tissue lysate (30 µg/Lane)
Lane 9: Rat liver tissue lysate (30 µg/Lane)
Lane 10: Rat lung tissue lysate (30 µg/Lane)

Predicted band size: 45 kDa
Observed band size: 70-140 kDa

Exposure time: Lane 1-4: 2 minutes 37 seconds; Lane 5-10: 5 minutes;

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 (ET1601-24) at 1/5,000 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.

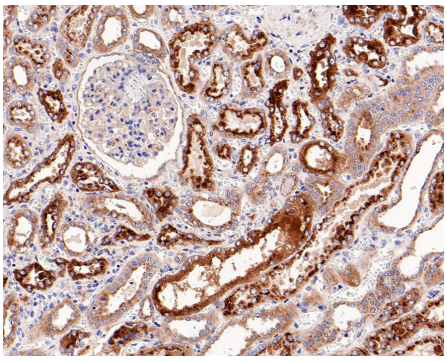

Fig2: Immunohistochemical analysis of paraffin-embedded human kidney tissue with Rabbit anti-LAMP2a antibody (ET1601-24) at 1/500 dilution.

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 (ET1601-24) at 1/500 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.

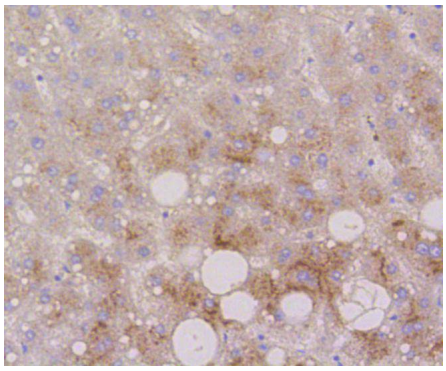

Fig3: Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-LAMP2a antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1601-24, 1/50) for 30 minutes 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.

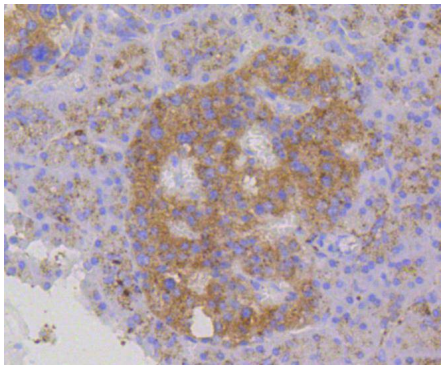

Fig4: Immunohistochemical analysis of paraffin-embedded human pancreas tissue using anti-LAMP2a antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1601-24, 1/200) for 30 minutes 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.

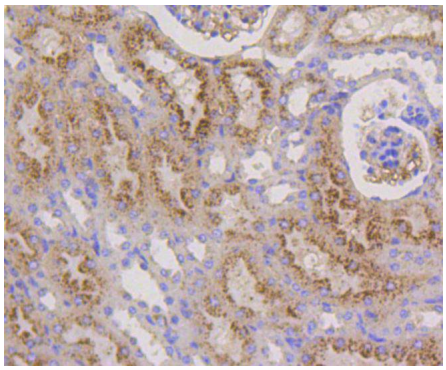

Fig5: Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using anti-LAMP2a antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1601-24, 1/50) for 30 minutes 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.

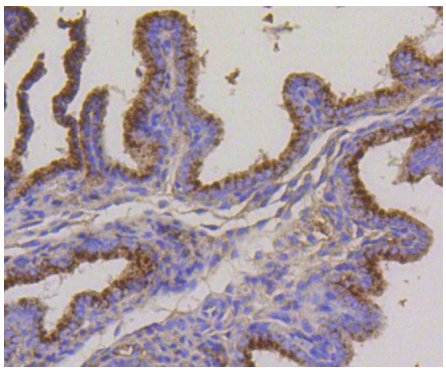

Fig6: Immunohistochemical analysis of paraffin-embedded mouse placenta tissue using anti-LAMP2a antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1601-24, 1/50) for 30 minutes 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.

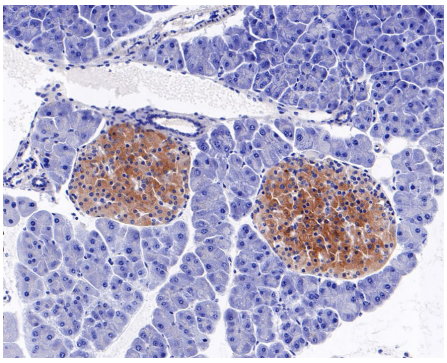

Fig7: Immunohistochemical analysis of paraffin-embedded mouse pancreas tissue with Rabbit anti-LAMP2a antibody (ET1601-24) at 1/500 dilution.

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 (ET1601-24) at 1/500 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.

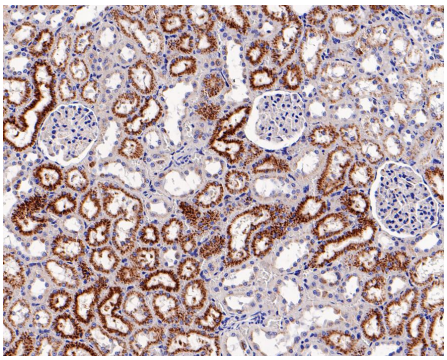

Fig8: Immunohistochemical analysis of paraffin-embedded rat kidney tissue with Rabbit anti-LAMP2a antibody (ET1601-24) at 1/500 dilution.

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 (ET1601-24) at 1/500 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. Guan, JJ. et al. 2015. DRAM1 regulates apoptosis through increasing protein levels and lysosomal localization of BAX. Cell death & disease. 6: e1624.
2. Gu, G. et al. 2013. Ubiquitin E3 Ligase A20 is Required in Degradation of Microbial Superantigens in Vascular Endothelial Cells. Cell Biochem. Biophys. 66: 649-655.