Anti-SYVN1 Antibody [JE44-67]

HA721874

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell, FC
Molecular Wt:	Predicted band size: 68 kDa
Clone number:	JE44-67

Description: E3 ubiquitin-protein ligase synoviolin is an enzyme that in humans is encoded by the SYVN1 gene. This gene encodes a protein involved in endoplasmic reticulum (ER)-associated degradation. The encoded protein removes unfolded proteins, accumulated during ER stress, by retrograde transport to the cytosol from the ER. This protein also uses the ubiquitin-proteasome system for additional degradation of unfolded proteins. This gene and the mitochondrial ribosomal protein L49 gene use in their respective 3' UTRs some of the same genomic sequence. Sequence analysis identified two transcript variants that encode different isoforms.

Immunogen: Synthetic peptide within Human SYVN1 aa 150-250.

Positive control: HEK-293 cell lysate, HepG2 cell lysate, Raji cell lysate, HCT 116 cell lysate, HeLa cell lysate, HeLa.

Subcellular location: Endoplasmic reticulum membrane.

Database links: SwissProt: Q86TM6 Human

Recommended Dilutions:

WB	1:2,000
IF-Cell	1:100
FC	1:1,000

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

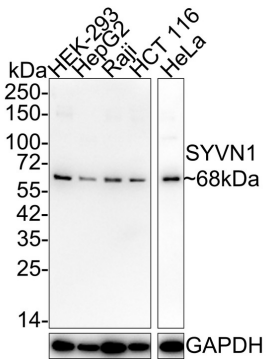

Fig1: Western blot analysis of SYVN1 on different lysates with Rabbit anti-SYVN1 antibody (HA721874) at 1/2,000 dilution.

Lane 1: HEK-293 cell lysate
Lane 2: HepG2 cell lysate
Lane 3: Raji cell lysate
Lane 4: HCT 116 cell lysate
Lane 5: HeLa cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 68 kDa
Observed band size: 68 kDa

Exposure time: 1 minute;

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 (HA721874) 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.

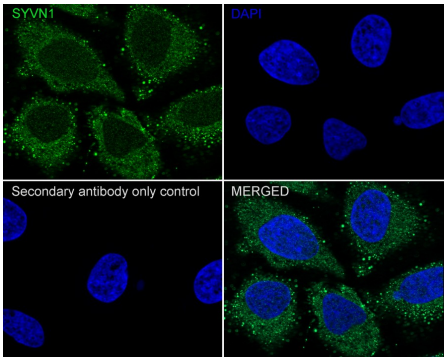

Fig2: Immunocytochemistry analysis of HeLa cells labeling SYVN1 with Rabbit anti-SYVN1 antibody (HA721874) at 1/100 dilution.

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-SYVN1 antibody (HA721874) 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.

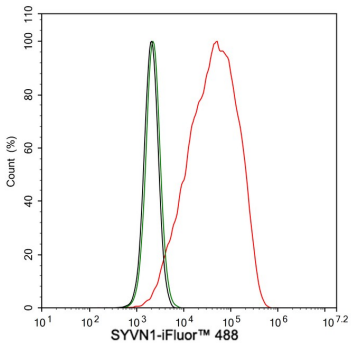

Fig3: Flow cytometric analysis of HeLa cells labeling SYVN1.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA721874, 1µg/mL) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Background References

1. Tian F et al. LncRNA SNHG7/miR-34a-5p/SYVN1 axis plays a vital role in proliferation, apoptosis and autophagy in osteoarthritis. Biol Res. 2020 Feb
2. Shi Y et al. E3 ubiquitin ligase SYVN1 is a key positive regulator for GSDMD-mediated pyroptosis. Cell Death Dis. 2022 Feb