Anti-STRAP Antibody [A7H11]

HA601007

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 38 kDa
Clone number:	A7H11

Description: The SMN complex catalyzes the assembly of small nuclear ribonucleoproteins (snRNPs), the building blocks of the spliceosome, and thereby plays an important role in the splicing of cellular pre-mRNAs. Most spliceosomal snRNPs contain a common set of Sm proteins SNRPB, SNRPD1, SNRPD2, SNRPD3, SNRPE, SNRPF and SNRPG that assemble in a heptameric protein ring on the Sm site of the small nuclear RNA to form the core snRNP (Sm core). In the cytosol, the Sm proteins SNRPD1, SNRPD2, SNRPE, SNRPF and SNRPG are trapped in an inactive 6S pICln-Sm complex by the chaperone CLNS1A that controls the assembly of the core snRNP. To assemble core snRNPs, the SMN complex accepts the trapped 5Sm proteins from CLNS1A forming an intermediate. Binding of snRNA inside 5Sm triggers eviction of the SMN complex, thereby allowing binding of SNRPD3 and SNRPB to complete assembly of the core snRNP. STRAP plays a role in the cellular distribution of the SMN complex. Negatively regulates TGF-beta signaling but positively regulates the PDPK1 kinase activity by enhancing its autophosphorylation and by significantly reducing the association of PDPK1 with 14-3-3 protein.

Immunogen: Recombinant protein within human STRAP aa 201-350/350.

Positive control: 293T cell lysate, Jurkat cell lysate, A549 cell lysate, MCF-7 cell lysate, SH-SY5Y cell lysate, human testis tissue.

Subcellular location: Cytoplasm, Nucleus.

Database links: SwissProt: Q9Y3F4 Human

Recommended Dilutions:

WB	1:500
IHC-P	1:200

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

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein G affinity purified.

Images

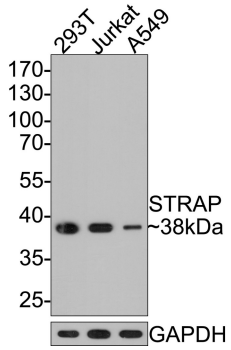

Fig1: Western blot analysis of STRAP on different lysates with Mouse anti-STRAP antibody (HA601007) at 1/500 dilution.

Lane 1: 293T cell lysate
Lane 2: Jurkat cell lysate
Lane 3: A549 cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 38 kDa
Observed band size: 38 kDa

Exposure time: 2 minutes;

10% 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 (HA601007) at 1/500 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1:100,000 dilution was used for 1 hour at room temperature.

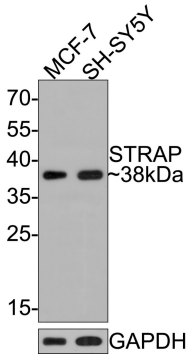

Fig2: Western blot analysis of STRAP on different lysates with Mouse anti-STRAP antibody (HA601007) at 1/500 dilution.

Lane 1: MCF-7 cell lysate
Lane 2: SH-SY5Y cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 38 kDa
Observed band size: 38 kDa

Exposure time: 1 minute;

12% 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 (HA601007) at 1/500 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1:100,000 dilution was used for 1 hour at room temperature.

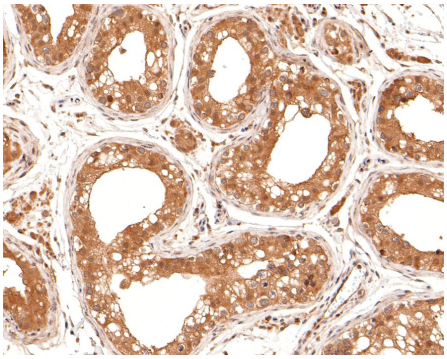

Fig3: Immunohistochemical analysis of paraffin-embedded human testis tissue with Mouse anti-STRAP antibody (HA601007) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 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 (HA601007) 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.

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

Background References

1. Anantha J. et. al. STRAP and NME1 Mediate the Neurite Growth-Promoting Effects of the Neurotrophic Factor GDF5. iScience. 2020 Aug
2. Huang L. et. al. STRAP reduces endoplasmic reticulum stress and apoptosis in cardiomyocytes and attenuates myocardial ischemia-reperfusion injury by activating PI3K/PDK1/Akt signaling pathway. Eur Rev Med Pharmacol Sci. 2020 Apr