Anti-PSMC5 Antibody [PSH0-22] - BSA and Azide free

HA750596

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 46 kDa
Clone number:	PSH0-22

Description: The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. The 19S regulator is composed of a base, which contains 6 ATPase subunits and 2 non-ATPase subunits, and a lid, which contains up to 10 non-ATPase subunits. Proteasomes are distributed throughout eukaryotic cells at a high concentration and cleave peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway. An essential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. This gene encodes one of the ATPase subunits, a member of the triple-A family of ATPases which have a chaperone-like activity. In addition to participation in proteasome functions, this subunit may participate in transcriptional regulation since it has been shown to interact with the thyroid hormone receptor and retinoid X receptor-alpha. Two transcript variants encoding different isoforms have been found for this gene.

Immunogen: Recombinant protein within Human PSMC5 aa 207-406 / 406.

Positive control: A431 cell lysate, MCF-7 cell lysate, Hela cell lysate, HepG2 cell lysate, 293T cell lysate, NIH/3T3 cell lysate, PC-12 cell lysate, mouse testis tissue lysate, mouse heart tissue lysate, rat testis tissue lysate, rat brain tissue lysate, human lung carcinoma tissue, mouse brain tissue, rat brain tissue.

Subcellular location: Cytoplasm, Nucleus.

Database links: SwissProt: P62195 Human | P62196 Mouse | P62198 Rat

Recommended Dilutions:

WB	1:1,000
IHC-P	1:1,000

Storage Buffer: 1*PBS (pH7.4).

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

Purity: Protein A affinity purified.

Images

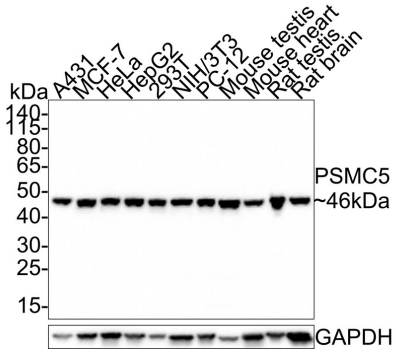

Fig1: Western blot analysis of PSMC5 on different lysates with Rabbit anti-PSMC5 antibody (HA750596) at 1/1,000 dilution.

Lane 1: A431 cell lysate (20 µg/Lane)
Lane 2: MCF-7 cell lysate (20 µg/Lane)
Lane 3: Hela cell lysate (20 µg/Lane)
Lane 4: HepG2 cell lysate (20 µg/Lane)
Lane 5: 293T cell lysate (20 µg/Lane)
Lane 6: NIH/3T3 cell lysate (20 µg/Lane)
Lane 7: PC-12 cell lysate (20 µg/Lane)
Lane 8: Mouse testis tissue lysate (40 µg/Lane)
Lane 9: Mouse heart tissue lysate (40 µg/Lane)
Lane 10: Rat testis tissue lysate (40 µg/Lane)
Lane 11: Rat brain tissue lysate (40 µg/Lane)

Predicted band size: 46 kDa
Observed band size: 46 kDa

Exposure time: 30 seconds;

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 (HA750596) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:300,000 dilution was used for 1 hour at room temperature.

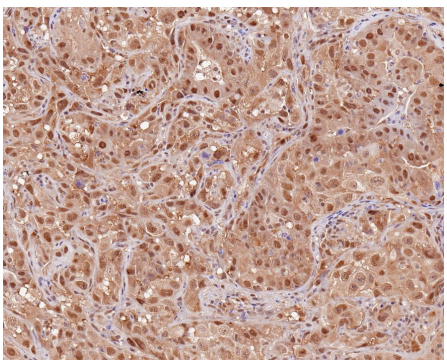

Fig2: Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue with Rabbit anti-PSMC5 antibody (HA750596) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) 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 (HA750596) at 1/1,000 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.

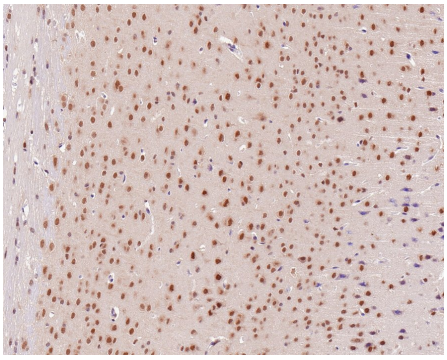

Fig3: Immunohistochemical analysis of paraffin-embedded mouse brain tissue with Rabbit anti-PSMC5 antibody (HA750596) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) 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 (HA750596) at 1/1,000 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.

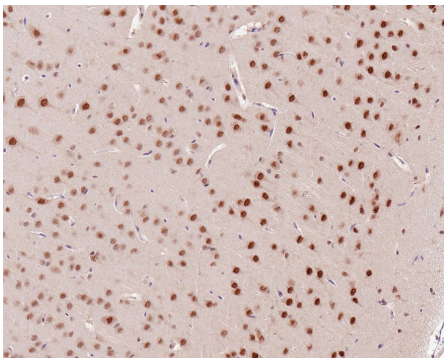

Fig4: Immunohistochemical analysis of paraffin-embedded rat brain tissue with Rabbit anti-PSMC5 antibody (HA750596) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) 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 (HA750596) at 1/1,000 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.

Background References

1. He Z et al. PSMC5 Promotes Proliferation and Metastasis of Colorectal Cancer by Activating Epithelial-Mesenchymal Transition Signaling and Modulating Immune Infiltrating Cells. Front Cell Dev Biol. 2021 Jul
2. Zavodszky E et al. Identification of a quality-control factor that monitors failures during proteasome assembly. Science. 2021 Aug