Anti-NAPSIN A Antibody [A9C4]

HA601097

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human
Applications:	IHC-P, IF-Cell
Molecular Wt:	Predicted band size: 45 kDa
Clone number:	A9C4

Description: Napsin-A is an aspartic proteinase that is encoded in humans by the NAPSA gene. The name napsin comes from novel aspartic proteinase of the pepsin family. The activation peptide of an aspartic proteinase acts as an inhibitor of the active site. These peptide segments, or pro-parts, are deemed important for correct folding, targeting, and control of the activation of aspartic proteinase zymogens. The pronapsin A gene is expressed predominantly in lung and kidney. Its translation product is predicted to be a fully functional, glycosylated aspartic proteinase precursor containing an RGD motif and an additional 18 residues at its C-terminus. Detection of NAPSA gene expression can be used to distinguish adenocarcinomas from other forms of lung cancer.

Immunogen: Recombinant protein within human NAPSIN A aa 51-200 / 420.

Positive control: Human kidney tissue, human lung carcinoma tissue, A549.

Subcellular location: Secreted.

Database links: SwissProt: O96009 Human

Recommended Dilutions:

IHC-P	1:4,000
IF-Cell	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 A affinity purified.

Images

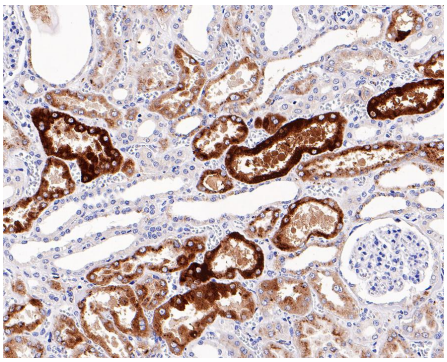

Fig1: Immunohistochemical analysis of paraffin-embedded human kidney tissue with Mouse anti-NAPSIN A antibody (HA601097) at 1/4,000 dilution.

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 (HA601097) at 1/4,000 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.

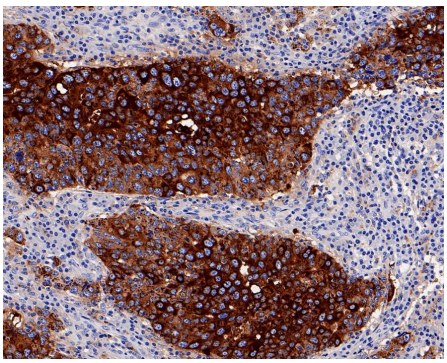

Fig2: Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue with Mouse anti-NAPSIN A antibody (HA601097) at 1/4,000 dilution.

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 (HA601097) at 1/4,000 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.

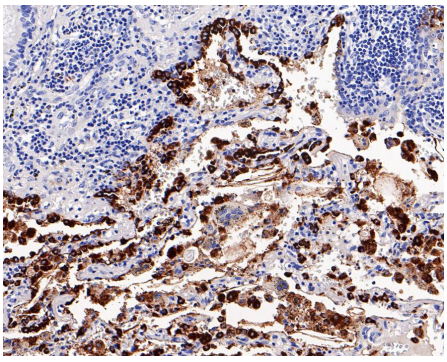

Fig3: Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue with Mouse anti-NAPSIN A antibody (HA601097) at 1/4,000 dilution.

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 (HA601097) at 1/4,000 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.

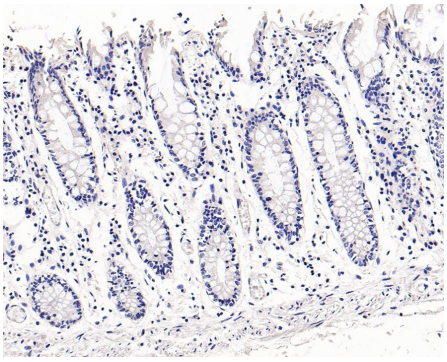

Fig4: Immunohistochemical analysis of paraffin-embedded human colon tissue (Negative control) with Mouse anti-NAPSIN A antibody (HA601097) at 1/2,000 dilution.

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 (HA601097) 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.

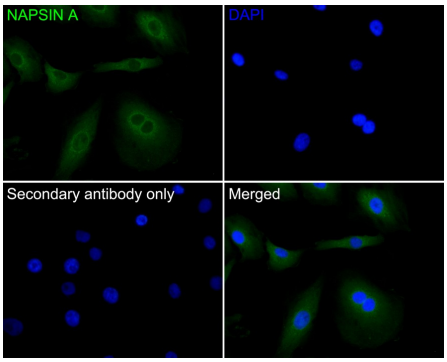

Fig5: Immunocytochemistry analysis of A549 cells labeling NAPSIN A with Mouse anti-NAPSIN A antibody (HA601097) at 1/200 dilution.

Cells were fixed in 4% paraformaldehyde for 30 minutes, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes, and then blocked with 2% BSA for 30 minutes at room temperature. Cells were then incubated with Mouse anti-NAPSIN A antibody (HA601097) at 1/200 dilution in 2% BSA overnight at 4 ℃. Goat Anti-Mouse IgG H&L (iFluor™ 488, HA1125) 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.

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

Background References

1. Weidemann S et al. Napsin A Expression in Human Tumors and Normal Tissues. Pathol Oncol Res. 2021 Apr
2. Wu J et al. Napsin A Expression in Subtypes of Thyroid Tumors: Comparison with Lung Adenocarcinomas. Endocr Pathol. 2020 Mar