# Anti-AKAP 95 Antibody [JE63-83]

## HA721019

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|---|---|
| **Product Type:** | Recombinant Rabbit monoclonal IgG, primary antibodies |
| **Species reactivity:** | Human, Mouse, Rat |
| **Applications:** | WB, IHC-P, IF-Cell |
| **Molecular Wt:** | Predicted band size: 76 kDa |
| **Clone number:** | JE63-83 |

**Description:** This gene encodes a member of the A-kinase anchor protein family. A-kinase anchor proteins are scaffold proteins that contain a binding domain for the RI/RII subunit of protein kinase A (PKA) and recruit PKA and other signaling molecules to specific subcellular locations. This gene encodes a nuclear A-kinase anchor protein that binds to the RII alpha subunit of PKA and may play a role in chromosome condensation during mitosis by targeting PKA and the condensin complex to chromatin. A pseudogene of this gene is located on the short arm of chromosome 9.

**Immunogen:** Recombinant protein within human AKAP 95 aa 1-150/692.

**Positive control:** HeLa cell lysate, 293T cell lysate, F9 cell lysate, Mouse liver tissue lysate, Rat liver tissue lysate, rat testis tissue, human lymph nodes tissue, human colon carcinoma tissue, mouse kidney tissue, Hela.

**Subcellular location:** Nucleus, Nucleus matrix, Nucleolus, Cytoplasm.

**Database links:** SwissProt: O43823 Human | Q9DBR0 Mouse | Q63014 Rat

**Recommended Dilutions:**

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| **WB** | 1:2,000 |
| **IHC-P** | 1:400 |
| **IF-Cell** | 1:50 |

**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

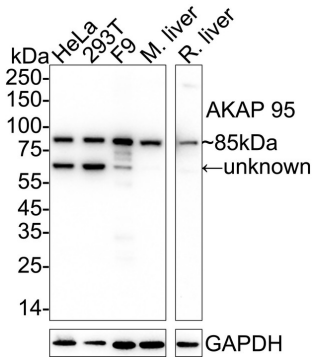


**Fig1:** Western blot analysis of AKAP 95 on different lysates with Rabbit anti-AKAP 95 antibody (HA721019) at 1/2,000 dilution.

Lane 1: HeLa cell lysate (20 µg/Lane)
Lane 2: 293T cell lysate (20 µg/Lane)
Lane 3: F9 cell lysate (20 µg/Lane)
Lane 4: Mouse liver tissue lysate (40 µg/Lane)
Lane 5: Rat liver tissue lysate (40 µg/Lane)

Predicted band size: 76 kDa
Observed band size: 85 kDa
Exposure time: Lane 1-4: 25 seconds; Lane 5: 3 minutes; ECL: K1801;
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 (HA721019) 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.

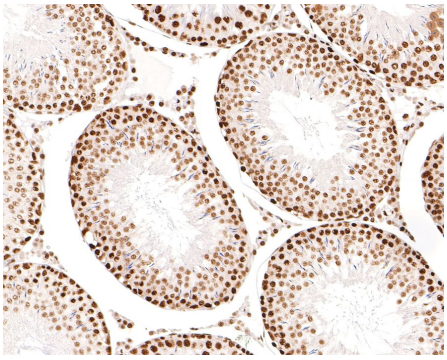

**Fig2:** Immunohistochemical analysis of paraffin-embedded rat testis tissue with Rabbit anti-AKAP 95 antibody (HA721019) at 1/400 dilution.

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 dd$H_2O$ and PBS, and then probed with the primary antibody (HA721019) at 1/400 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.

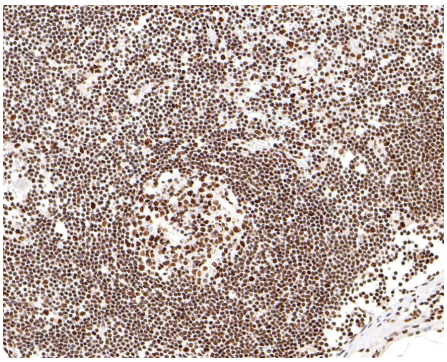

**Fig3:** Immunohistochemical analysis of paraffin-embedded human lymph nodes tissue with Rabbit anti-AKAP 95 antibody (HA721019) at 1/400 dilution.

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 dd$H_2O$ and PBS, and then probed with the primary antibody (HA721019) at 1/400 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.

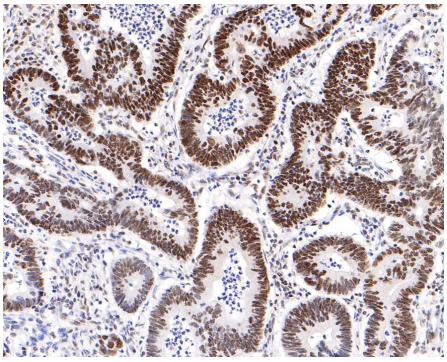

**Fig4:** Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue with Rabbit anti-AKAP 95 antibody (HA721019) at 1/400 dilution.

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 dd$H_2O$ and PBS, and then probed with the primary antibody (HA721019) at 1/400 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.

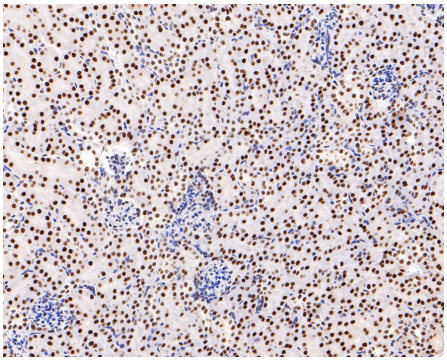

**Fig5:** Immunohistochemical analysis of paraffin-embedded mouse kidney tissue with Rabbit anti-AKAP 95 antibody (HA721019) at 1/400 dilution.

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 dd$H_2O$ and PBS, and then probed with the primary antibody (HA721019) at 1/400 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.

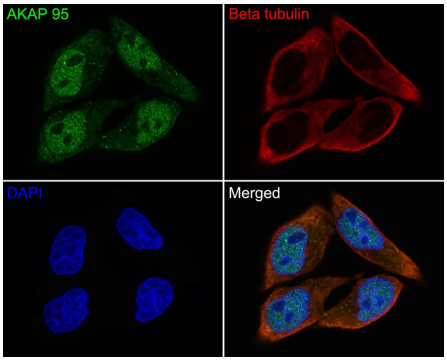


**Fig6:** Immunocytochemistry analysis of Hela cells labeling AKAP 95 with Rabbit anti-AKAP 95 antibody (HA721019) at 1/50 dilution.

Cells were fixed in 4% paraformaldehyde for 10 minutes at 37 ℃, permeabilized with 0.05% Triton X-100 in PBS for 20 minutes, and then blocked with 2% negative goat serum for 30 minutes at room temperature. Cells were then incubated with Rabbit anti-AKAP 95 antibody (HA721019) at 1/50 dilution in 2% negative goat serum overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/200 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 647, HA1127) were used as the secondary antibody at 1/1,000 dilution.

## Background References

1. Li W. et. al. Biophysical properties of AKAP95 protein condensates regulate splicing and tumorigenesis. Nat Cell Biol. 2020 Aug
2. Chen R. et. al. Cx43 and AKAP95 regulate G1/S conversion by competitively binding to cyclin E1/E2 in lung cancer cells. Thorac Cancer. 2020 Jun