Anti-Phospho-UBF1 (S484) Antibody [JE77-43]

HA722477

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 89 kDa
Clone number:	JE77-43

Description: This gene encodes a member of the HMG-box DNA-binding protein family. The encoded protein plays a critical role in ribosomal RNA transcription as a key component of the pre-initiation complex, mediating the recruitment of RNA polymerase I to rDNA promoter regions. The encoded protein may also play important roles in chromatin remodeling and pre-rRNA processing, and its activity is regulated by both phosphorylation and acetylation. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. Pseudogenes of this gene are located on the short arm of chromosomes 3, 11 and X and the long arm of chromosome 11. Recognizes the ribosomal RNA gene promoter and activates transcription mediated by RNA polymerase I (Pol I) through cooperative interactions with the transcription factor SL1/TIF-IB complex. It binds specifically to the upstream control element and can activate Pol I promoter escape.

Immunogen: Synthetic phosphopeptide corresponding to residues surrounding Ser484 of human UBF1.

Positive control: HeLa cell lysate, HeLa treated with 100ng/mL Nocodazole for 18 hours cell lysate, human testis tissue, human breast cancer tissue, mouse testis tissue, rat testis tissue.

Subcellular location: Nucleus, nucleolus.

Database links: SwissProt: P17480 Human | P25976 Mouse | P25977 Rat

Recommended Dilutions:

WB	1:1,000
IHC-P	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

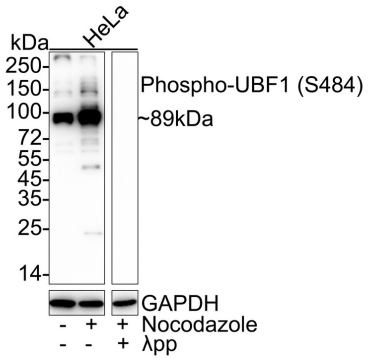

Fig1: Western blot analysis of Phospho-UBF1 (S484) on different lysates with Rabbit anti-Phospho-UBF1 (S484) antibody (HA722477) at 1/1,000 dilution.

Lane 1: HeLa cell lysate
Lane 2: HeLa treated with 100ng/mL Nocodazole for 18 hours cell lysate
Lane 3: HeLa treated with 100ng/mL Nocodazole for 18 hours cell lysate, then the membrane treated with λpp for 1 hour

Lysates/proteins at 10 µg/Lane.

Predicted band size: 89 kDa
Observed band size: 89 kDa

Exposure time: 17 seconds; 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 (HA722477) at 1/1,000 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.

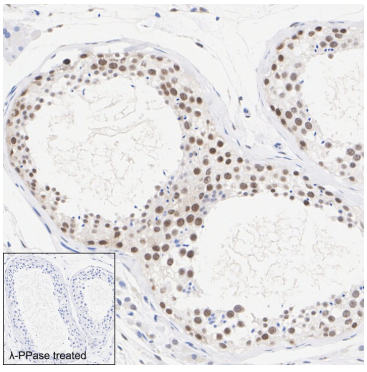

Fig2: Immunohistochemical analysis of paraffin-embedded human testis tissue untreated / treated with λpp with Rabbit anti-Phospho-UBF1 (S484) antibody (HA722477) at 1/1,000 dilution.

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 (HA722477) 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.

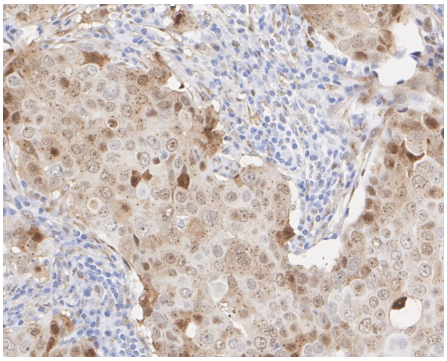

Fig3: Immunohistochemical analysis of paraffin-embedded human breast cancer tissue with Rabbit anti-Phospho-UBF1 (S484) antibody (HA722477) at 1/1,000 dilution.

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 (HA722477) 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.

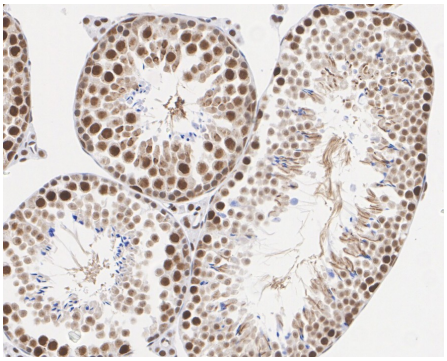

Fig4: Immunohistochemical analysis of paraffin-embedded mouse testis tissue with Rabbit anti-Phospho-UBF1 (S484) antibody (HA722477) at 1/1,000 dilution.

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 (HA722477) 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.

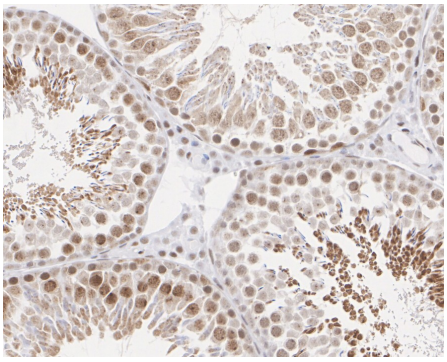

Fig5: Immunohistochemical analysis of paraffin-embedded rat testis tissue with Rabbit anti-Phospho-UBF1 (S484) antibody (HA722477) at 1/1,000 dilution.

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 (HA722477) 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. Edvardson S., Nicolae C.M., Agrawal P.B., Mignot C., Payne K., Prasad A.N., Prasad C., Sadler L., Nava C., Elpeleg O. Heterozygous de novo UBTF gain-of-function variant is associated with neurodegeneration in childhood. Am. J. Hum. Genet. 101:267-273 (2017)
2. Panov K.I., Friedrich J.K., Russell J., Zomerdijk J.C. UBF activates RNA polymerase I transcription by stimulating promoter escape. EMBO J. 25:3310-3322 (2006)