Anti-p23 Antibody [JU09-31]

ET1706-43

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell, IHC-P, IP
Molecular Wt:	Predicted band size: 19 kDa
Clone number:	JU09-31

Description: P23, also known as PTGES3 (prostaglandin E synthase 3) or TEBP (telomerase-binding protein p23), is a ubiquitously expressed protein that functions as a cochaperone and plays an important role in signal transduction. One of several proteins in the HSP 90-based molecular chaperone complex, P23 promotes the breakdown of transcriptional regulatory complexes by disrupting receptor-mediated transcriptional activation. P23 acts in a hormone-dependent manner to chaperone estrogen receptor alpha (ERα), a steroid complex, to its mature form and to regulate the expression of ERα-related genes. Localized to the cytoplasm, P23 interacts with the glucocorticoid receptor (GR) and, through disassembly of the GR transcription machinery, is thought to inhibit GR-dependent transcription. The involvement of P23 in various steroid receptor-mediated pathways suggests close involvement in signal transduction and regulation of cellular processes. Upregulation of P23 is implicated in the invasion and metastasis of various cancers.

Immunogen: Synthetic peptide within Human p23 aa 43-92 / 160.

Positive control: SK-Br-3 cell lysate, A431 cell lysate, A431, Hela, human tonsil tissue, human colon carcinoma tissue, mouse fallopian tube tissue, rat testis tissue.

Subcellular location: Cytoplasm.

Database links: SwissProt: Q15185 Human | Q9R0Q7 Mouse | P83868 Rat

Recommended Dilutions:

WB	1:500-1:2,000
IF-Cell	1:50-1:200
IHC-P	1:100-1:500
IP	1:10-1:50

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

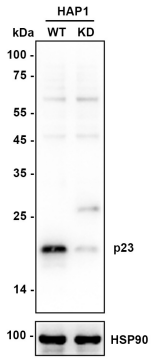

Fig1: Western blot analysis of p23 on different lysates with Rabbit anti-p23 antibody (ET1706-43) at 1/1,000 dilution.

Lane 1: HAP1-parental cell lysate
Lane 2: HAP1-p23 KD cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 19 kDa
Observed band size: 19 kDa

Exposure time: 6 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 (ET1706-43) at 1/1,000 dilution was used in primary antibody dilution (K1803) at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

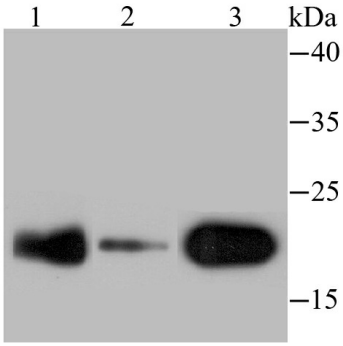

Fig2: Western blot analysis of p23 on different lysates with Rabbit anti-p23 antibody (ET1706-43) at 1/500 dilution.

Lane 1: Mouse brain tissue (20 µg/Lane)
Lane 2: SK-Br-3 cell lysates
Lane 3: A431 cell lysates

Lysates/proteins at 10 µg/Lane.

Predicted band size: 23 kDa
Observed band size: 23 kDa

Exposure time: 2 minutes;

15% 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 (ET1706-43) at 1/500 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 200,000 dilution was used for 1 hour at room temperature.

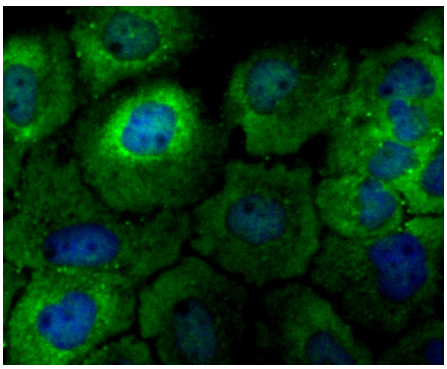

Fig3: Immunocytochemistry analysis of A431 cells labeling p23 with Rabbit anti-p23 antibody (ET1706-43) at 1/50 dilution.

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-p23 antibody (ET1706-43) at 1/50 dilution in 2% negative goat serum overnight at 4 ℃. Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. Nuclear DNA was labelled in blue with DAPI.

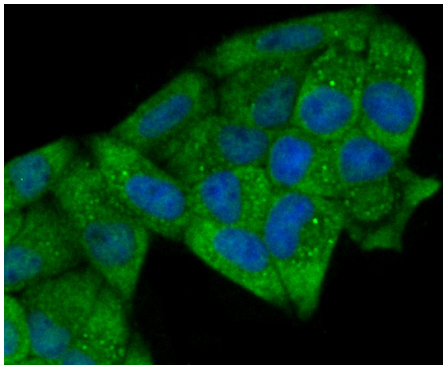

Fig4: Immunocytochemistry analysis of Hela cells labeling p23 with Rabbit anti-p23 antibody (ET1706-43) at 1/50 dilution.

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-p23 antibody (ET1706-43) at 1/50 dilution in 2% negative goat serum overnight at 4 ℃. Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution.Nuclear DNA was labelled in blue with DAPI.

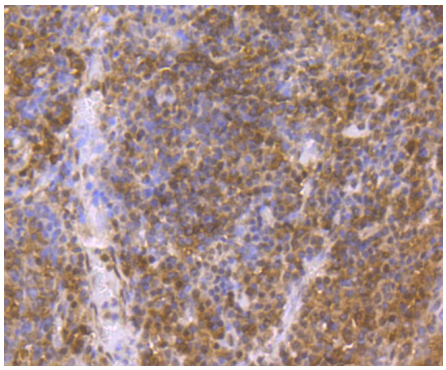

Fig5: Immunohistochemical analysis of paraffin-embedded human tonsil tissue with Rabbit anti-p23 antibody (ET1706-43) at 1/50 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) 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 (ET1706-43) at 1/50 dilution for 0.5 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.

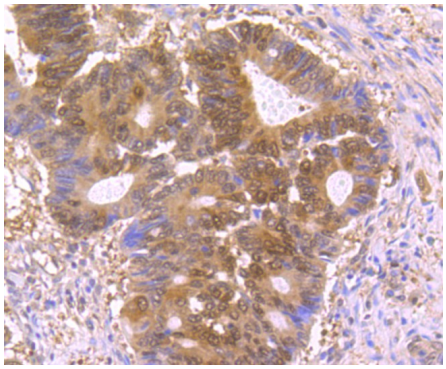

Fig6: Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue with Rabbit anti-p23 antibody (ET1706-43) at 1/50 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) 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 (ET1706-43) at 1/50 dilution for 0.5 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.

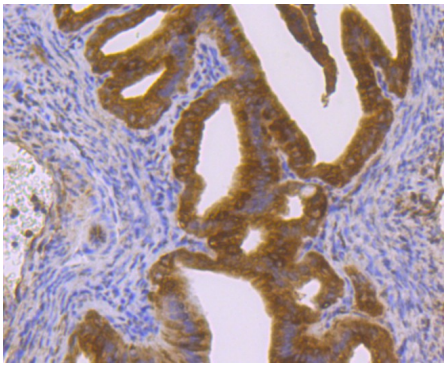

Fig7: Immunohistochemical analysis of paraffin-embedded mouse fallopian tube tissue with Rabbit anti-p23 antibody (ET1706-43) at 1/50 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) 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 (ET1706-43) at 1/50 dilution for 0.5 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.

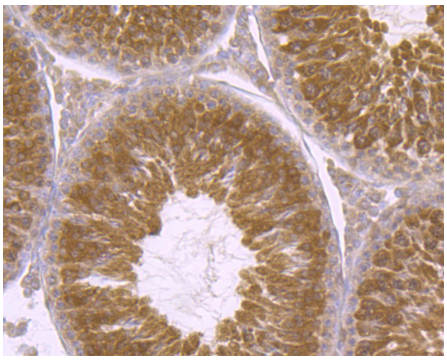

Fig8: Immunohistochemical analysis of paraffin-embedded rat testis tissue with Rabbit anti-p23 antibody (ET1706-43) at 1/50 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) 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 (ET1706-43) at 1/50 dilution for 0.5 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 Y et al. Ailanthone targets p23 to overcome MDV3100 resistance in castration-resistant prostate cancer. Nat Commun 7:13122 (2016).
2. Silva NSM et al. Comparative studies of the low-resolution structure of two p23 co-chaperones for Hsp90 identified in Plasmodium falciparum genome. Int J Biol Macromol 108:193-204 (2017).