Anti-Phospho-p53 (T55) Antibody [ST0439]

Product Type: Recombinant Rabbit monoclonal IgG, primary antibodies

Species reactivity: Human
Applications: WB, IHC-P

Molecular Wt: Predicted band size: 53 kDa

Clone number: ST0439

Description: p53, a DNA-binding, oligomerization domain- and transcription activation domain-containing

tumor suppressor, upregulates growth arrest and apoptosis-related genes in response to stress signals, thereby influencing programmed cell death, cell differentiation, and cell cycle control mechanisms. p53 localizes to the nucleus, yet can be chaperoned to the cytoplasm by the negative regulator, MDM2. MDM2 is an E3 ubiquitin ligase that is upregulated in the presence of active p53, where it poly-ubiquitinates p53 for proteasome targeting. p53 fluctuates between latent and active DNA-binding conformations and is differentially activated through posttranslational modifications, including phosphorylation and acetylation. Mutations in the DNA-binding domain (DBD) of p53, amino acids 110-286, can compromise energetically-favorable association with cis elements and are implicated in several human

cancers.

Immunogen: Synthetic phospho-peptide corresponding to residues surrounding Thr55 of Human p53 aa

31-80 / 393.

Positive control: HEK-293 treated with 200nM Calyculin A and 1uM Okadaic Acid for 1 hours whole cell

lysate, human esophagus tissue.

Subcellular location: Cytoplasm, Nucleus, Endoplasmic reticulum, Mitochondrion matrix, Cytoskeleton.

Database links: SwissProt: P04637 Human

Recommended Dilutions:

WB 1:500-1:2,000 **IHC-P** 1:100-1:500

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw

cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.



Service mail:support@huabio.cn



Images

kDa 2501501007550-53kDa
3725201510- + Calyculin A
- + Okadaic Acid

Fig1: Western blot analysis of Phospho-p53 (T55) on different lysates with Rabbit anti-Phospho-p53 (T55) antibody (ET1609-13) at 1/1,000 dilution.

Lane 1: HEK-293 whole cell lysate

Lane 2: HEK-293 treated with 200nM Calyculin A and 1uM Okadaic Acid for 1 hours whole cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 53 kDa Observed band size: 53 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 (ET1609-13) 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 1:100,000 dilution was used for 1 hour at room temperature.

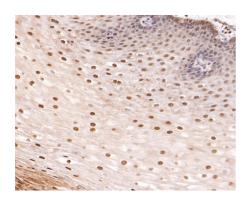


Fig2: Immunohistochemical analysis of paraffin-embedded human esophagus tissue using anti-Phospho-p53 (T55) antibody. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 20 minutes. The tissues were blocked in 1% BSA for 30 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (ET1609-13, 1/400) for 30 minutes 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.

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

Background References

- 1. Ambade A et al. Alcoholic hepatitis accelerates early hepatobiliary cancer by increasing stemness and miR-122-mediated HIF-1a activation. Sci Rep 6:21340 (2016).
- 2. Yang K et al. Effect of PLCe gene silencing on inhibiting the cancerous transformation of ulcerative colitis. Exp Ther Med 12:422-426 (2016).

Hangzhou Huaan Biotechnology Co., Ltd.

Technical:0086-571-89986345

Service mail:support@huabio.cn

