

Anti-Cdk6 Antibody

ER40101



Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Green monkey
Applications:	WB, IF-Cell, IHC-P
Molecular Wt:	Predicted band size: 37 kDa

Description: CDK6 protein contains a catalytic core composed of a serine/threonine domain. This protein also contains an ATP-binding pocket, inhibitory and activating phosphorylation sites, a PSTAIRE-like cyclin-binding domain and an activating T-loop motif. CDK6 is involved in a positive feedback loop that activates transcription factors through a reaction cascade. CDK6 is important for the control of G1 to S phase transition. However, in recent years, new evidence proved that the presence of CDK6 is not essential for proliferation in every cell type, the cell cycle has a complex circuitry of regulation and the role of CDK6 might be more important in certain cell types than in others, where CDK4 or CDK2 can act as protein kinases compensating its role.

Immunogen: Synthetic peptide within human Cdk6 aa 267-326 / 326.

Positive control: HeLa cell lysate, SK-OV-3 cell lysate, NIH/3T3 cell lysate, C6 cell lysate, K562 cell lysate, COS-1 cell lysate, HeLa, HepG2, human lung cancer tissue, mouse thymus tissue, rat thymus tissue.

Subcellular location: Cytoplasm, nucleus, Cell projection, Cytoskeleton.

Database links: SwissProt: Q00534 Human | Q64261 Mouse
Entrez Gene: 114483 Rat

Recommended Dilutions:

WB	1:1,000-1:2,000
IF-Cell	1:200
IHC-P	1:200

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C long term.

Purity: Immunogen affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

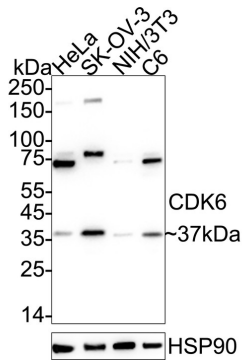
Service mail:support@huabio.cn

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Images

Fig1: Western blot analysis of Cdk6 on different lysates with Rabbit anti-Cdk6 antibody (ER40101) at 1/1,000 dilution.

Lane 1: HeLa cell lysate
Lane 2: SK-OV-3 cell lysate
Lane 3: NIH/3T3 cell lysate
Lane 4: C6 cell lysate



Lysates/proteins at 20 µg/Lane.

Predicted band size: 37 kDa
Observed band size: 37 kDa

Exposure time: 25 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 (ER40101) at 1/1,000 dilution was used in 5% NFDm/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

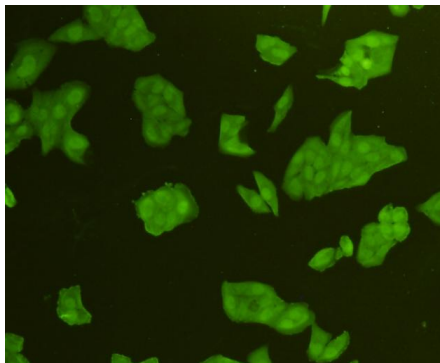


Fig2: ICC staining CDK6 in HeLa cells (green). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

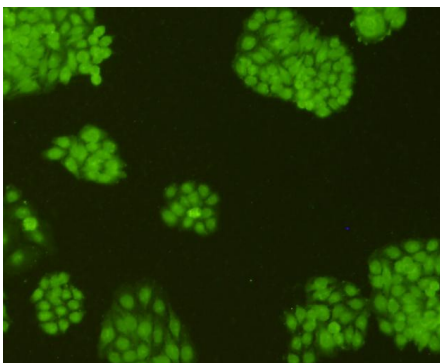


Fig3: ICC staining CDK6 in HepG2 cells (green). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

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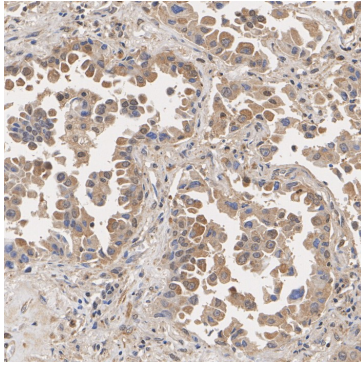


Fig4: Immunohistochemical analysis of paraffin-embedded human lung cancer tissue with Rabbit anti-Cdk6 antibody (ER40101) at 1/200 dilution.

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 ddH₂O and PBS, and then probed with the primary antibody (ER40101) at 1/200 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.

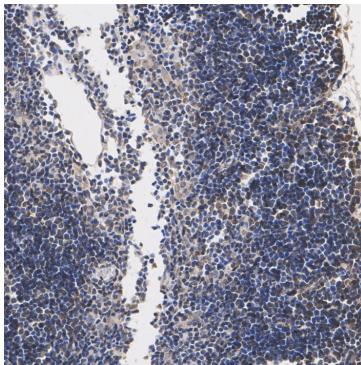


Fig5: Immunohistochemical analysis of paraffin-embedded mouse thymus tissue with Rabbit anti-Cdk6 antibody (ER40101) at 1/200 dilution.

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 ddH₂O and PBS, and then probed with the primary antibody (ER40101) at 1/200 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.

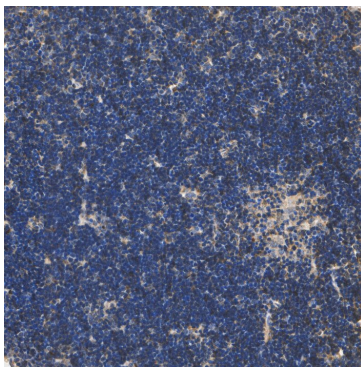


Fig6: Immunohistochemical analysis of paraffin-embedded rat thymus tissue with Rabbit anti-Cdk6 antibody (ER40101) at 1/200 dilution.

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 ddH₂O and PBS, and then probed with the primary antibody (ER40101) at 1/200 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.

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

Background References

1. "CDK6 blocks differentiation: coupling cell proliferation to the block to differentiation in leukemic cells." Matushansky I., Radparvar F., Skoultchi A.I. *Oncogene* 22:4143-4149(2003)
2. "Bone morphogenetic protein 2-induced osteoblast differentiation requires Smad-mediated down-regulation of Cdk6." Ogasawara T., Kawaguchi H., Jinno S., Hoshi K., Itaka K., Takato T., Nakamura K., Okayama H. *Mol. Cell. Biol.* 24:6560-6568(2004)
3. "CDK4 and CDK6 delay senescence by kinase-dependent and p16INK4a-independent mechanisms." Ruas M., Gregory F., Jones R., Poolman R., Starborg M., Rowe J., Brookes S., Peters G. *Mol. Cell. Biol.* 27:4273-

