Anti-Cyclin E2 Antibody [40-89-R]

HA601146

Product Type:	Recombinant Mouse monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P, IF-Cell
Molecular Wt:	Predicted band size: 47 kDa
Clone number:	40-89-R

Description: Cyclin E2 is a protein that in humans is encoded by the CCNE2 gene. It is a G1 cyclin that binds Cdk2 and is inhibited by p27(Kip1) and p21(Cip1). It plays a role in the G1/S portion of the cell cycle and also has putative interactions with proteins CDKN1A, CDKN1B, and CDK3. Aberrant expression can lead to cancer.

Immunogen: Synthetic peptide within Human Cyclin E2 aa 1-50 / 404.

Positive control: HeLa cell lysate, Jurkat cell lysate, K-562 cell lysate, A549 cell lysate, MCF7 cell lysate, HEK-293 cell lysate, HepG2 cell lysate, human thyroid tissue, human testis tissue, HeLa.

Subcellular location: Nucleus.

Database links: SwissProt: O96020 Human

Recommended Dilutions:

WB	1:1,000
IHC-P	1:200-1:1,000
IF-Cell	1:100

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

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

Purity: Protein A affinity purified.

Images

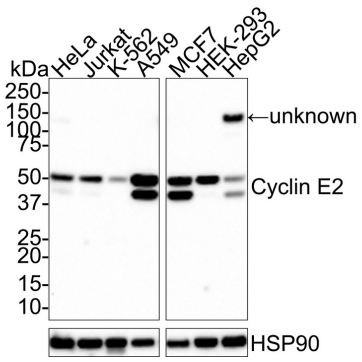

Fig1: Western blot analysis of Cyclin E2 on different lysates with Mouse anti-Cyclin E2 antibody (HA601146) at 1/1,000 dilution.

Lane 1: HeLa cell lysate
Lane 2: Jurkat cell lysate
Lane 3: K-562 cell lysate
Lane 4: A549 cell lysate
Lane 5: MCF7 cell lysate
Lane 6: HEK-293 cell lysate
Lane 7: HepG2 cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 47 kDa
Observed band size: 51/47 kDa

Exposure time: 2 minutes;

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 (HA601146) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1:150,000 dilution was used for 1 hour at room temperature.

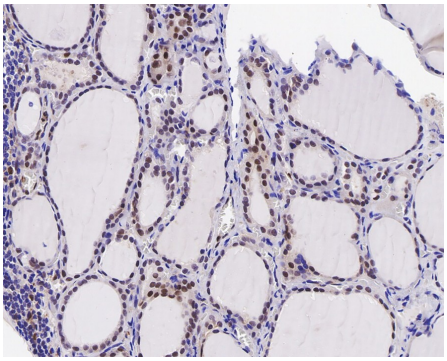

Fig2: Immunohistochemical analysis of paraffin-embedded human thyroid tissue with Mouse anti-Cyclin E2 antibody (HA601146) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) 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 (HA601146) 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.

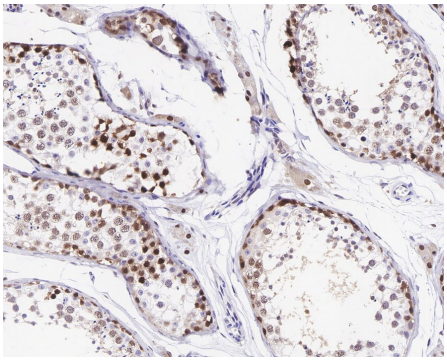

Fig3: Immunohistochemical analysis of paraffin-embedded human testis tissue with Mouse anti-Cyclin E2 antibody (HA601146) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) 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 (HA601146) 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.

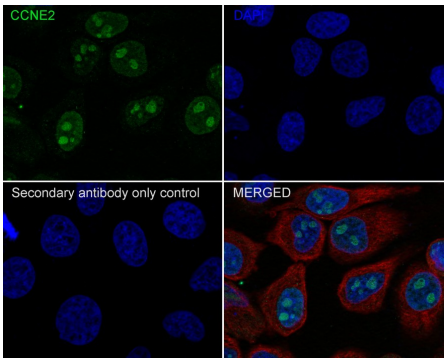

Fig4: Immunocytochemistry analysis of HeLa cells labeling Cyclin E2 with Mouse anti-Cyclin E2 antibody (HA601146) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 30 minutes, 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 Mouse anti-Cyclin E2 antibody (HA601146) at 1/100 dilution in 2% negative goat serum overnight at 4 ℃. Goat Anti-Mouse IgG H&L (iFluor™ 488, HA1125) was used as the secondary antibody at 1/1,000 dilution. Nuclear DNA was labelled in blue with DAPI.

beta Tubulin (ET1602-4, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Rabbit IgG H&L (iFluor™ 594, HA1122) were used as the secondary antibody at 1/1,000 dilution.

Background References

1. Liu CZ et al. Clinical significance of CCNE2 protein and mRNA expression in thyroid cancer tissues. Adv Med Sci. 2020 Sep
2. Wu D et al. CARM1 promotes non-small cell lung cancer progression through upregulating CCNE2 expression. Aging (Albany NY). 2020 Jun