Anti-c-Myc Antibody [JE01-20]

HA722895

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Monkey
Applications:	WB, IF-Cell
Molecular Wt:	Predicted band size: 50 kDa
Clone number:	JE01-20

Description: Myc proteins are transcription factors that activate expression of many pro-proliferative genes through binding enhancer box sequences (E-boxes) and recruiting histone acetyltransferases (HATs). Myc is thought to function by upregulating transcript elongation of actively transcribed genes through the recruitment of transcriptional elongation factors. It can also act as a transcriptional repressor. By binding Miz-1 transcription factor and displacing the p300 co-activator, it inhibits expression of Miz-1 target genes. In addition, myc has a direct role in the control of DNA replication.This activity could contribute to DNA amplification in cancer cells.

Immunogen: Synthetic peptide within human c-Myc aa 1-50 / 439.

Positive control: HeLa cell lysate, A549 cell lysate, HepG2 cell lysate, Jurkat cell lysate, NIH/3T3 cell lysate, C6 cell lysate, COS-1 cell lysate, HeLa, NIH/3T3.

Subcellular location: Nucleus, nucleoplasm, nucleolus, Cytoplasm.

Database links: SwissProt: P01106 Human | P01108 Mouse | P09416 Rat

Recommended Dilutions:

WB	1:1,000
IF-Cell	1:100

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

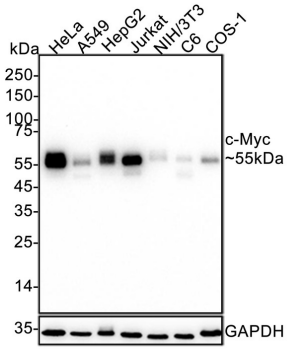

Fig1: Western blot analysis of c-Myc on different lysates with Rabbit anti-c-Myc antibody (HA722895) at 1/1,000 dilution.

Lane 1: HeLa cell lysate
Lane 2: A549 cell lysate
Lane 3: HepG2 cell lysate
Lane 4: Jurkat cell lysate
Lane 5: NIH/3T3 cell lysate
Lane 6: C6 cell lysate
Lane 7: COS-1 cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 50 kDa
Observed band size: 55 kDa

Exposure time: 14 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 (HA722895) 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.

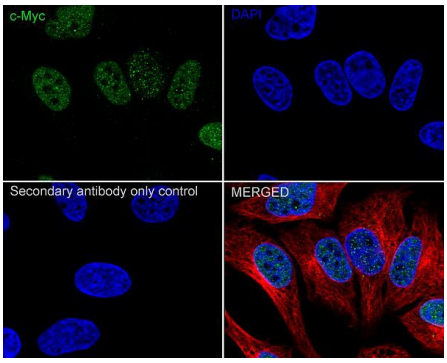

Fig2: Immunocytochemistry analysis of HeLa cells labeling c-Myc with Rabbit anti-c-Myc antibody (HA722895) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-c-Myc antibody (HA722895) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

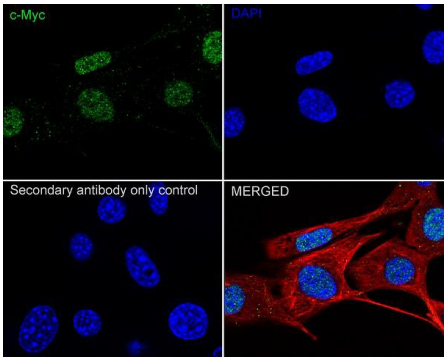

Fig3: Immunocytochemistry analysis of NIH/3T3 cells labeling c-Myc with Rabbit anti-c-Myc antibody (HA722895) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-c-Myc antibody (HA722895) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

Background References

1. Gao FY, Li XT, Xu K, Wang RT, Guan XX. c-MYC mediates the crosstalk between breast cancer cells and tumor microenvironment. Cell Commun Signal. 2023 Jan 31;21(1):28. doi: 10.1186/s12964-023-01043-1. PMID: 36721232; PMCID: PMC9887805.
2. Mai S, Mushinski JF. c-Myc-induced genomic instability. J Environ Pathol Toxicol Oncol. 2003;22(3):179-99. doi: 10.1615/jenvpathtoxoncol.v22.i3.30. PMID: 14529093.