Anti-Myc tag Antibody [A3-B4]

EM31105

Product Type:	Mouse monoclonal IgG2b, primary antibodies
Species reactivity:	Species independent
Applications:	WB, IF-Cell, ELISA, FC, IP
Clone number:	A3-B4

Description: Myc gene encodes for a transcription factor that is believed to regulate expression of 15% of all genes through binding on Enhancer Box sequences (E-boxes) and recruiting histone acetyltransferases (HATs). c-Myc is commonly activated in a variety of tumor cells and plays an important role in cellular proliferation, differentiation, apoptosis and cell cycle progression. This Myc-Tag antibody detects Myc-tagged fusion proteins.

Immunogen: Synthetic peptide immune sequence is EQKLISEEDLC-KLH.

Positive control: Myc-tagged recombinant protein.

Recommended Dilutions:

WB	1:2,000
IF-Cell	1:50
FC	1:50-1:100
IP	2-5 μg/ml.

Storage Buffer: 1*PBS (pH7.4), 0.2% 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 G affinity purified.

Images

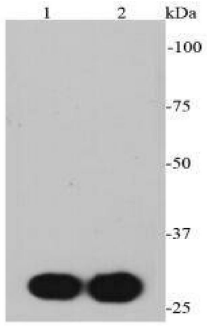

Fig1: Western blot analysis of Myc tag on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (EM31105, 1/2,000) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1:5,000 dilution was used for 1 hour at room temperature.
Positive control:
Lane 1: C-terminal Myc-tagged recombinant protein
Lane 2: N-terminal Myc-tagged recombinant protein

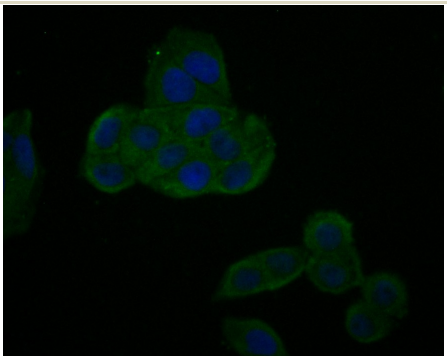

Fig2: ICC staining of Myc tag in Hela cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (EM31105, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Mouse IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

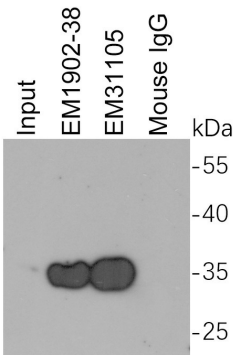

Fig3: Myc tag was immunoprecipitated in 2µg C terminal Myc Tag fusion protein lysate with EM31105 at 2 µg/20 µl agarose. Western blot was performed from the immunoprecipitate using R1208-1 at 1/1,000 dilution. Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:200,000 dilution was used for 60 mins at room temperature.

Lane 1: Myc Tag fusion protein lysate (input).
Lane 2: EM1902-38 IP in Myc Tag fusion protein lysate.
Lane 3: EM31105 IP in Myc Tag fusion protein lysate.
Lane 4: Mouse IgG instead of EM31105 in Myc Tag fusion protein lysate.

Blocking/Dilution buffer: 5% NFDM/TBST

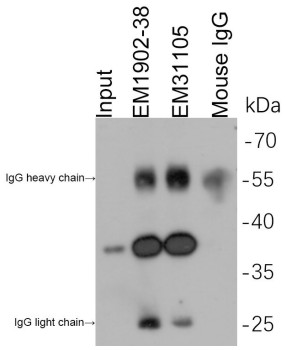

Fig4: Myc tag was immunoprecipitated in 2µg N terminal Myc Tag fusion protein lysate with EM31105 at 2 µg/20 µl agarose. Western blot was performed from the immunoprecipitate using R1208-1 at 1/1,000 dilution. Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:200,000 dilution was used for 60 mins at room temperature.

Lane 1: Myc Tag fusion protein lysate (input).
Lane 2: EM1902-38 IP in Myc Tag fusion protein lysate.
Lane 3: EM31105 IP in Myc Tag fusion protein lysate.
Lane 4: Mouse IgG instead of EM31105 in Myc Tag fusion protein lysate.

Blocking/Dilution buffer: 5% NFDM/TBST

Background References

1. "A quantitative atlas of mitotic phosphorylation."Dephoure N., Zhou C., Villen J., Beausoleil S.A., Bakalarski C.E., Elledge S.J., Gygi S.P.Proc. Natl. Acad. Sci. U.S.A. 105:10762-10767(2008)
2. "Transactivation of gene expression by Myc is inhibited by mutation at the phosphorylation sites Thr-58 and Ser-62."Gupta S., Seth A., Davis R.J. Proc. Natl. Acad. Sci. U.S.A. 90:3216-3220(1993)