Anti-Phospho-c-Myc (T58 + S62) Antibody [SZ02-06] ET1603-24

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB, IP, FC
Molecular Wt:	Predicted band size: 49 kDa
Clone number:	SZ02-06

Description: c-Myc-, N-Myc- and L-Myc-encoded proteins function in cell proliferation, differentiation and neoplastic disease. Myc proteins are nuclear proteins with relatively short half lives. Amplification of the c-Myc gene has been found in several types of human tumors including lung, breast and colon carcinomas, while the N-Myc gene has been found amplified in neuroblastomas. The L-Myc gene has been reported to be amplified and expressed at high level in human small cell lung carcinomas. The presence of three sequence motifs in the c-Myc COOH terminus, including the leucine zipper, the helix-loop-helix and a basic region provided initial evidence for a sequence-specific binding function. A basic region helix-loop-helix leucine zipper motif (bHLH-Zip) protein, designated Max, specifically associates with c-Myc, N-Myc and L-Myc proteins. The Myc-Max complex binds to DNA in a sequence-specific manner under conditions where neither Max nor Myc exhibit appreciable binding. Max can also form heterodimers with at least two additional bHLH-Zip proteins, Mad and Mxi1, and Mad-Max dimers have been shown to repress transcription through interaction with mSin3.

Immunogen: Synthetic phospho-peptide corresponding to residues surrounding Thr58 and Ser62 of Human c-Myc.

Positive control: HCT 116 cell lysate, HCT 116 treated with 25μM MG-132 for 4 hours cell lysate, EL4 cell lysate, EL4 treated with 25μM MG-132 for 4 hours cell lysate, K562.

Subcellular location: Nucleus.

Database links: SwissProt: P01106 Human | P01108 Mouse

Recommended Dilutions:

WB	1:1,000-1:5,000
FC	1:50-1:100
IP	Use at an assay dependent concentration.

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

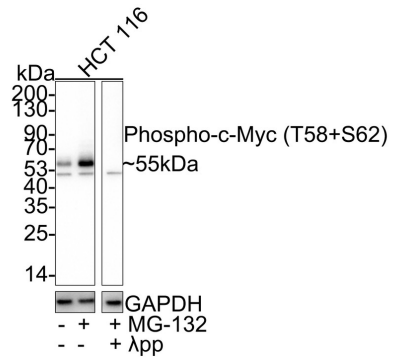

Fig1: Western blot analysis of Phospho-c-Myc (T58 + S62) on different lysates with Rabbit anti-Phospho-c-Myc (T58 + S62) antibody (ET1603-24) at 1/5,000 dilution.

Lane 1: HCT 116 cell lysate
Lane 2: HCT 116 treated with 25μM MG-132 for 4 hours cell lysate
Lane 3: HCT 116 treated with 25μM MG-132 for 4 hours cell lysate, then the membrane treated with λpp for 1 hour

Lysates/proteins at 15 μg/Lane.

Predicted band size: 49 kDa
Observed band size: 55 kDa

Exposure time: 3 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 (ET1603-24) at 1/5,000 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.

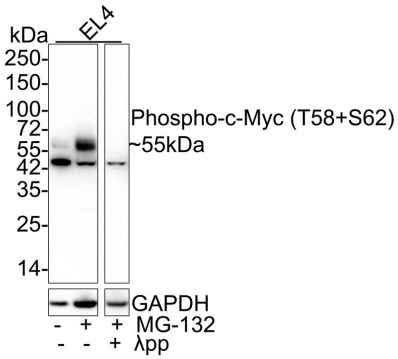

Fig2: Western blot analysis of Phospho-c-Myc (T58 + S62) on different lysates with Rabbit anti-Phospho-c-Myc (T58 + S62) antibody (ET1603-24) at 1/1,000 dilution.

Lane 1: EL4 cell lysate
Lane 2: EL4 treated with 25μM MG-132 for 4 hours cell lysate
Lane 3: EL4 treated with 25μM MG-132 for 4 hours cell lysate, then the membrane treated with λpp for 1 hour

Lysates/proteins at 20 μg/Lane.

Predicted band size: 49 kDa
Observed band size: 55 kDa

Exposure time: 1 minute 59 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 (ET1603-24) 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.

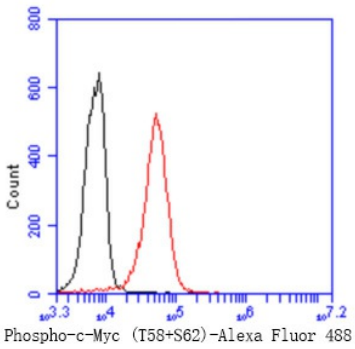

Fig3: Flow cytometric analysis of Phospho-c-Myc (T58 + S62) was done on K562 cells. The cells were fixed, permeabilized and stained with the primary antibody (ET1603-24, 1/50) (red). After incubation of the primary antibody at room temperature for an hour, the cells were stained with a Alexa Fluor 488-conjugated Goat anti-Rabbit IgG Secondary antibody at 1/1000 dilution for 30 minutes.Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

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

Background References

1. Franco M et al. A Novel Secreted Protein, MYR1, Is Central to Toxoplasma's Manipulation of Host Cells. MBio 7:e02231-15 (2016).
2. Agarwal R et al. Role of immunohistochemistry in the era of genetic testing in MYC-positive aggressive B-cell lymphomas: a study of 209 cases. J Clin Pathol 69:266-70 (2016).