Anti-c-Myc Antibody

0912-2

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB
Molecular Wt:	Predicted band size: 49 kDa

Description: Myc is a family of regulator genes and proto-oncogenes that code for transcription factors. The Myc family consists of three related human genes: c-myc (MYC), l-myc (MYCL), and n-myc (MYCN). c-myc (also sometimes referred to as MYC) was the first gene to be discovered in this family, due to homology with the viral gene v-myc. In cancer, c-myc is often constitutively (persistently) expressed. This leads to the increased expression of many genes, some of which are involved in cell proliferation, contributing to the formation of cancer. A common human translocation involving c-myc is critical to the development of most cases of Burkitt lymphoma. Constitutive upregulation of Myc genes have also been observed in carcinoma of the cervix, colon, breast, lung and stomach. Myc is thus viewed as a promising target for anti-cancer drugs. Unfortunately, Myc possesses several features that render it undruggable such that any anti-cancer drugs for Myc dysregulation will require acting on the protein indirectly, i.e. targeting the mRNA for the protein rather than a small molecule that targets the protein itself. In the human genome, C-myc is located on chromosome 8 and is believed to regulate expression of 15% of all genes through binding on enhancer box sequences (E-boxes). In addition to its role as a classical transcription factor, N-myc may recruit histone acetyltransferases (HATs). This allows it to regulate global chromatin structure via histone acetylation.

Immunogen:	Synthetic peptide within human C-myc aa 390-439.
Positive control:	Myc-tagged recombinant protein, A549 cell lysate, Raji cell lysate.
Subcellular location:	Nucleus.
Database links:	SwissProt: P01106 Human
Recommended Dilutions:	
WB	1:500
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:	Immunogen affinity purified.

Images

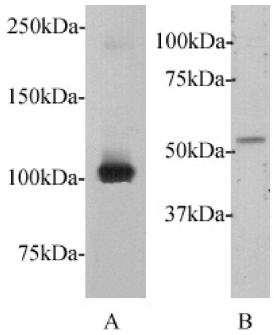

Fig1: Western blot analysis on myc-tagged recombinant protein (A) and A549 cell lysates (B).

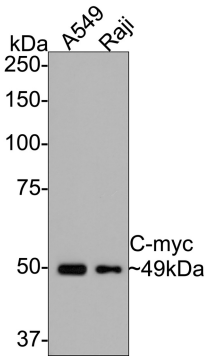

Fig2: Western blot analysis of c-Myc on different lysates with Rabbit anti-c-Myc antibody (0912-2) at 1/1,000 dilution.

Lane 1: A549 cell lysate
Lane 2: Raji cell lysate

Lysates/proteins at 10 µg/Lane.

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

Exposure time: 2 minutes;

8% 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 (0912-2) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:300,000 dilution was used for 1 hour at room temperature.

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

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)