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antibody and ELISA experts

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Anti-c-Myc Antibody (Monoclonal, 9E10)

Catalog Number: MA1028

About Myc

C-Myc is an oncogene that functions both in the stimulation of cell proliferation and in apoptosis. c-Myc elicits its oncogenic activity by causing immortalization, and to a lesser extent the transformation of cells, in addition to several other mechanisms. The c-MYC proto-oncogene encodes a transcription factor that is critical for cell growth and proliferation. It is one of the genes frequently altered in cancer cells in which it exhibits constitutive activity. Downregulation of c-Myc is critical for 2-Methoxyestradiol (2ME2)-induced oxidative stress and apoptosis in AML cells. And its up-regulation is important for promoting lymphocyte cell division, and demonstrating that GFP-c-Myc expression is a marker of proliferating lymphocytes in vivo.

Overview

Product Name	Anti-c-Myc Antibody (Monoclonal, 9E10)
Reactive Species	Human
Description	Boster Bio Anti-c-Myc Antibody (Monoclonal, 9E10) catalog # MA1028. Tested in IHC, ICC, WB applications. This antibody reacts with Human.
Application	IHC, ICC, WB
Clonality	Monoclonal Clone: 9E10
Formulation	Mouse IgG in stabilizing components, 1.2% sodium acetate and 0.01mg NaN3.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	P09416

Technical Details

Immunogen	Synthetic peptide corresponding to residues 408-439 of the human p62c-Myc protein.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot, and HRP Conjugated anti-Mouse IgG Super Vision Assay Kit (SV0001-1) for IHC(P) and ICC.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Mouse IgG1
Form	Lyophilized
Concentration	Adding 1 ml of PBS buffer will yield a concentration of 100 ug/ml.

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Purification	Ascites
Suggested Dilutions	Immunohistochemistry (Paraffin-embedded Section), 5ug/ml, Human Immunocytochemistry , 1ug/ml, Human, - Western blot, 1ug/ml, Human

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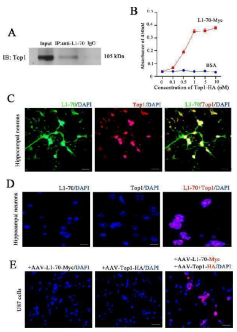
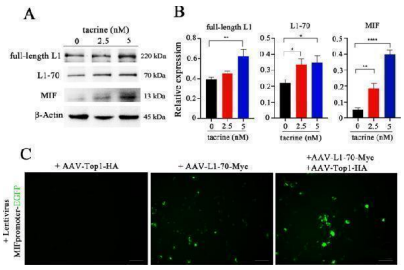
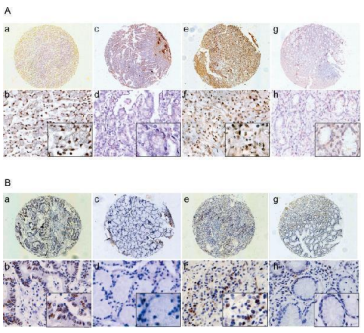
Anti-c-Myc Antibody (Monoclonal, 9E10) (MA1028) Images



L1-70 is associated with Top1. A Co-immunoprecipitation of the hippocampus tissue homogenates from 5- to 7-day-old wild-type mice with an antibody against L1 cytoplasmic domain being used for the co-immunoprecipitation and antibody against Top1 being used for western blotting. B ELISA for measuring the interaction between L1-70 and Top1 which were prepared from genetically engineered bacteria expressing recombinant L1-70-Myc and Top1-HA. Antibodies against Myc and HA tags were used for the identification of L1-70 protein and Top1 protein. The absorbance of L1-70-myc increased with the higher concentration of Top1-HA and showed saturation at 1 nM. C Co-expression of L1-70 and Top1 in primary cultured cells from the hippocampus of wild-type newborn mice. Immunofluorescence staining for L1-70 and Top1. L1-70 (green) colocalized with Top1 (red) in the nucleus. D Proximity ligation assay (Duolink) of the interaction between endogenous L1-70 protein and Top1 protein in primary hippocampal neurons from wild-type newborn mice. L1-70/Top1 complexes are indicated by the red dots. E Proximity ligation assay (Duolink) of the interaction between recombinant L1-70-Myc protein and Top1-HA protein transduced in U87 cells (which lack expression of L1) with recombinant adeno-associated virus expressing L1-70-Myc or/and Top1-HA. Antibodies against Myc and HA tags were used in the Duolink analysis. Three groups were transduced with recombinant viruses, AAV-Top1-HA, AAV-L1-70-Myc, or both. Positive signals could be found only in U87 cells transduced with both adeno-associated viruses. Scale bar: 20 μm. Index in PubMed under a CC BY license. PMID: 35013124



The L1-70/Top1 complex regulates MIF expression in hippocampal neurons. A Western blot analysis of the cell lysates of neuroblastoma N2a cells treated with tacrine. Antibodies against L1 cytoplasmic domain, against MIF and against beta-actin were used for immunoblotting. Expression of L1 and L1-70 was induced by tacrine and accompanied by an increase in MIF expression level. B Relative full-length L1, L1-70, and MIF levels were calculated and normalized to beta-actin. The data represent means ± SD, * p



Comparison of the expression of lncRNA PVT1 and c-myc in GC and normal tissues by ISH and IHC. (A) Comparison of the expression of lncRNA PVT1 in GC and normal tissues by TMA and ISH. PVT1 staining was stronger in GC tissues. (a) PVT1 staining in Han GC tissues (40×); (b) PVT1 staining in Han GC tissues (200×, 400× in the lower right corner); (c) PVT1 staining in Han normal gastric tissues (40×); (d) PVT1 staining in Han normal gastric tissues (200×, 400× in the lower right corner); (e) PVT1 staining in Uygur GC tissues (40×); (f) PVT1 staining in Uygur GC tissues (200×, 400× in the lower right corner); (g) PVT1 staining in Uygur normal

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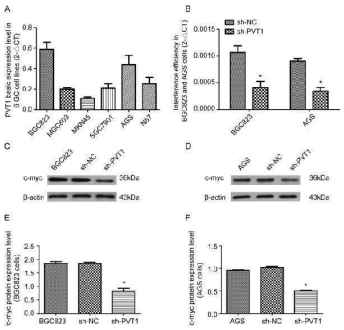
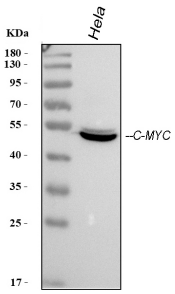
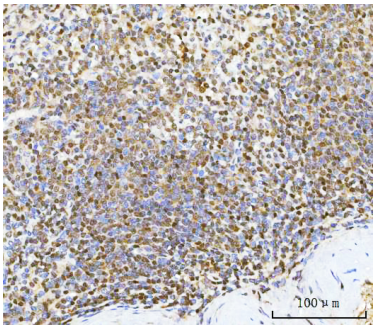
gastric tissues (40×); (h) PVT1 staining in Uygur normal gastric tissues (200×, 400× in the lower right corner). (B) Comparison of c-myc expression in GC and normal tissues by TMA and IHC. Staining of c-myc was stronger in GC tissues. (a) c-myc staining in Han GC tissues (40×); (b) c-myc staining in Han GC tissues (200×, 400× in the lower right corner); (c) c-myc staining in Han normal gastric tissues (40×; (d) c-myc staining in Han normal gastric tissues (200×, 400× in the lower right corner); (e) c-myc staining in Uygur GC tissues (40×); (f) c-myc staining in Uygur GC tissues (200×, 400× in the lower right corner); (g) c-myc staining in Uygur normal gastric tissues (40×); (h) c-myc staining in Uygur normal gastric tissues (200×, 400× in the lower right corner). Index in PubMed under a CC BY license. PMID: 30679629



Decreased c-myc expression in BGC823 and AGS cells after interference with PVT1 expression. (A) Real time-PCR results show the endogenous PVT1 expression levels in the six GC cell lines BGC823, MGC803, MKN45, SGC7901, AGS and N87. (B) RNAi was used to interfere with the expression of PVT1 in BGC823 and AGS cells, and then the efficiencies of PVT1 knockdown were investigated using real time-PCR. (C , D) Detection of c-myc protein expression levels by western blotting in BGC823 and AGS cells after silencing of PVT1. * P



Western blot analysis of c-Myc using anti-c-Myc antibody (MA1028). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-c-Myc antigen affinity purified monoclonal antibody (Catalog # MA1028) at 1 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for c-Myc at approximately 49 kDa. The expected band size for c-Myc is at 49 kDa.



IHC analysis of c-Myc using anti-c-Myc antibody (MA1028). c-Myc was detected in paraffin-embedded section of human spleen tissues. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5ug/ml mouse anti-c-Myc Antibody (MA1028) overnight at 4°C. Peroxidase Conjugated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-

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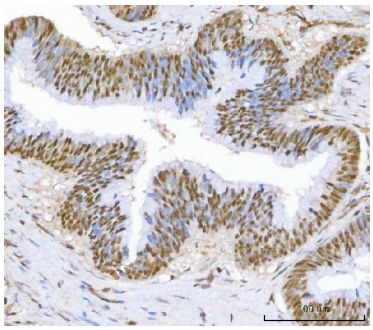
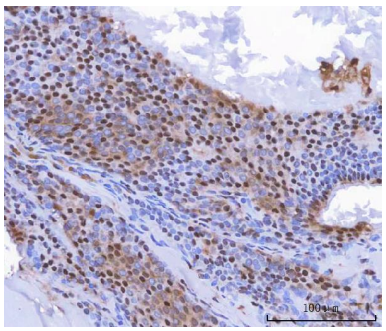
Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.



IHC analysis of c-Myc using anti-c-Myc antibody (MA1028). c-Myc was detected in paraffin-embedded section of human colorectal adenocarcinoma tissues. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5ug/ml mouse anti-c-Myc Antibody (MA1028) overnight at 4°C. Peroxidase Conjugated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.



IHC analysis of c-Myc using anti-c-Myc antibody (MA1028). c-Myc was detected in paraffin-embedded section of human thyroid cancer tissues. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5ug/ml mouse anti-c-Myc Antibody (MA1028) overnight at 4°C. Peroxidase Conjugated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.

16 Publications Citing This Product

1. PubMed ID: 24194897, Li M, Tian L, Wang L, Yao H, Zhang J, Lu J, Sun Y, Gao X, Xiao H, Liu M. Plos One. 2013 Oct 23;8(10):E77829. Doi: 10.1371/Journal.Pone.0077829. Ecollection 2013. Down-Regulation Of Mir-129-5P Inhibits Growth And Induces Apoptosis In Laryngeal Squa...

2. PubMed ID: 25151579, Zhao P, Li Y, Gao G, Wang S, Yan Y, Zhan X, Liu Z, Mao Z, Chen S, Wang L. Eur J Med Chem. 2014 Oct 30;86:165-74. Doi: 10.1016/J.Ejmech.2014.08.049. Epub 2014 Aug 15. Design, Synthesis And Biological Evaluation Of N-Alkyl Or Aryl Substituted Isoind...

3. PubMed ID: 20473779, Wang H, Huo N, Li F, Fu S, Xue Y, Yang T, Wen X, Ding Y, Duan X. Mol Cell Biochem. 2010 Sep;342(1-2):191-9. Doi: 10.1007/S11010-010-0483-9. Epub 2010 May 16. Osteogenic Role Of Endosomal Chloride Channels In Mc3T3-E1 Cells.

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Anti-c-Myc Antibody (Monoclonal, 9E10)

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