c-MYC (PTR2340) Mouse mAb

Catalog#: AM6477 | Size: 30μL/50μL/100μL

Main Information

Target	Host Species	Reactivity	Application	MW	Conjugated/Modification
c-Myc	Mouse	Human, Mouse, Rat	IHC, WB, IF, ELISA	48kD (Calculated) 57kD (Observed)	Unmodified

Detailed Information

Recommeded Dilution Ratio	IHC 1:200-1000; WB 1:500-2000; IF 1:100-500; ELISA 1:1000-5000
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Specificity	This antibody detects endogenous levels of c-MYC protein.
Purification	Protein G
Storage	-15°C to -25°C/1 year(Do not lower than -25°C)
MW(Calculated)	48kD
MW(Observed)	57kD
Modification	Unmodified
Clonality	Monoclonal
Clone Number	PTR2340
Isotype	IgG2b,Kappa

Antigen&Target Information

Immunogen	Synthesized peptide derived from human c-MYC AA range: 350-453
Specificity	This antibody detects endogenous levels of c-MYC protein.
Gene Name	MYC BHLHE39
Protein Name	Myc proto-oncogene protein (Class E basic helix-loop-helix protein 39) (bHLHe39) (Proto-oncogene c-Myc) (Transcription factor p64)
Other Name	Myc proto-oncogene protein ;Class E basic helix-loop-helix protein 39 ;bHLHe39 ;Proto-oncogene c-Myc ;Transcription factor p64 ;

Database Link

Organism	Gene ID	SwissProt
Human	4609	P01106
Mouse	17869	P01108
Rat	24577	P09416

Background

v-myc avian myelocytomatosis viral oncogene homolog(MYC) Homo sapiens The protein encoded by this gene is a multifunctional, nuclear phosphoprotein that plays a role in cell cycle progression, apoptosis and cellular transformation. It functions as a transcription factor that regulates transcription of specific target genes. Mutations, overexpression, rearrangement and translocation of this gene have been associated with a variety of hematopoietic tumors, leukemias and lymphomas, including Burkitt lymphoma. There is evidence to show that alternative translation initiations from an upstream, in-frame non-AUG (CUG) and a downstream AUG start site result in the production of two isoforms with distinct N-termini. The synthesis of non-AUG initiated protein is suppressed in Burkitt's lymphomas, suggesting its importance in the normal function of this gene. [provided by RefSeq, Jul 2008].

Function

Disease:A chromosomal aberration involving MYC may be a cause of a form of B-cell chronic lymphocytic leukemia. Translocation t(8;12)(q24;q22) with BTG1.,Disease:Overexpression of MYC is implicated in the etiology of a variety of hematopoietic tumors.,Function:Participates in the regulation of gene transcription. Binds DNA both in a non-specific manner and also specifically to recognizes the core sequence 5'-CAC[GA]TG-3'. Seems to activate the transcription of growth-related genes.,online information:Myc entry,PTM:Phosphorylated by PRKDC.,similarity:Contains 1 basic helix-loop-helix (bHLH) domain.,subunit:Efficient DNA binding requires dimerization with another bHLH protein. Binds DNA as a heterodimer with MAX. Interacts with TAF1C and SPAG9. Interacts with PARP10. Interacts with KDM5A and KDM5B.

Cellular Localization

Nuclear

Research Areas

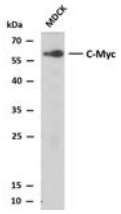
- MAPK signaling pathway
- ErbB signaling pathway
- Cell cycle
- PI3K-Akt signaling pathway
- Cellular senescence
- Wnt signaling pathway
- TGF-beta signaling pathway
- Hippo signaling pathway
- Signaling pathways regulating pluripotency of stem cells
- JAK-STAT signaling pathway
- Thyroid hormone signaling pathway
- Salmonella infection
- Hepatitis C
- Hepatitis B
- Human cytomegalovirus infection
- Human T-cell leukemia virus 1 infection
- Kaposi sarcoma-associated herpesvirus infection
- Epstein-Barr virus infection
- Pathways in cancer
- Transcriptional misregulation in cancer
- Proteoglycans in cancer
- MicroRNAs in cancer

- Chemical carcinogenesis - receptor activation
- Colorectal cancer
- Endometrial cancer
- Thyroid cancer
- Bladder cancer
- Chronic myeloid leukemia
- Acute myeloid leukemia
- Small cell lung cancer
- Breast cancer
- Hepatocellular carcinoma
- Gastric cancer
- Central carbon metabolism in cancer

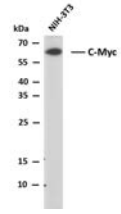
Signaling Pathway

Cellular Processes >> Cell growth and death >> Cell cycle
Cellular Processes >> Cell growth and death >> Cellular senescence
Cellular Processes >> Cellular community - eukaryotes >> Signaling pathways regulating pluripotency of stem cells
Organismal Systems >> Endocrine system >> Thyroid hormone signaling pathway
Human Diseases >> Cancer: overview >> Pathways in cancer
Human Diseases >> Cancer: overview >> Transcriptional misregulation in cancer
Human Diseases >> Cancer: overview >> MicroRNAs in cancer
Human Diseases >> Cancer: overview >> Central carbon metabolism in cancer
Human Diseases >> Cancer: specific types >> Colorectal cancer
Human Diseases >> Cancer: specific types >> Hepatocellular carcinoma
Human Diseases >> Cancer: specific types >> Gastric cancer
Human Diseases >> Cancer: specific types >> Thyroid cancer
Human Diseases >> Cancer: specific types >> Acute myeloid leukemia
Human Diseases >> Cancer: specific types >> Chronic myeloid leukemia
Human Diseases >> Cancer: specific types >> Bladder cancer
Human Diseases >> Cancer: specific types >> Endometrial cancer
Human Diseases >> Cancer: specific types >> Breast cancer
Human Diseases >> Cancer: specific types >> Small cell lung cancer
Environmental Information Processing >> Signal transduction >> MAPK signaling pathway
Environmental Information Processing >> Signal transduction >> ErbB signaling pathway
Environmental Information Processing >> Signal transduction >> Wnt signaling pathway
Environmental Information Processing >> Signal transduction >> TGF-beta signaling pathway
Environmental Information Processing >> Signal transduction >> Hippo signaling pathway
Environmental Information Processing >> Signal transduction >> JAK-STAT signaling pathway
Environmental Information Processing >> Signal transduction >> PI3K-Akt signaling pathway

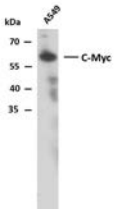
Validation Data



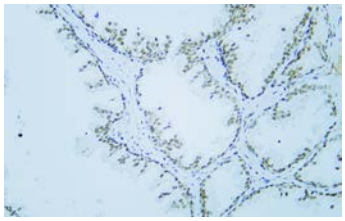
Whole cell lysates of MDCK were separated by 12% SDS-PAGE, and the membrane was blotted with anti-C-Myc(PTR2340) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: MDCK



Whole cell lysates of NIH-3T3 were separated by 12% SDS-PAGE, and the membrane was blotted with anti-C-Myc(PTR2340) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: NIH-3T3

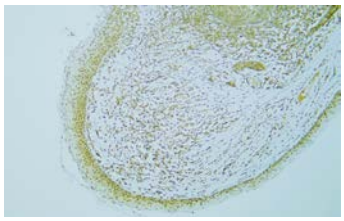


Whole cell lysates of A549 were separated by 12% SDS-PAGE, and the membrane was blotted with anti-C-Myc antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: A549



Human prostate tissue was stained with Anti-c-MYC (PTR2340) Antibody

Human skin tissue was stained with Anti-c-MYC (PTR2340) Antibody



Human tonsil tissue was stained with Anti-c-MYC (PTR2340) Antibody

Contact Information

+886-32876194 www.acebiolab.com Order: order@acebiolab.com Support: service@acebiolab.com
RM. 7, 13F., NO. 268, SEC. 1, GAOTIEZHANQIAN W. RD., ZHONGLI DIST., TAOYUAN CITY 320016 , TAIWAN (R.O.C.)