

MYC Antibody (T58)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1985D**Specification**

MYC Antibody (T58) - Product Information

Application	IHC-P, WB,E
Primary Accession	P01106
Other Accession	P09416 , Q29031 , P01108 , P01109 , Q2HJ27 , P24793 , Q63379 , P03966 , P04198 , Q9PSJ0 , P18444 , P15171 , Q7ZVS9 , P52160 , P06171 , Q28566
Reactivity	Human
Predicted	Xenopus, Zebrafish, Chicken, Mouse, Rat, Bovine, Pig, Sheep
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	50565
Antigen Region	36-65

MYC Antibody (T58) - Additional Information**Gene ID** 4609**Other Names**

Myc proto-oncogene protein, Class E basic helix-loop-helix protein 39, bHLHe39, Proto-oncogene c-Myc, Transcription factor p64, MYC, BHLHE39

Target/Specificity

This MYC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 36-65 amino acids from human MYC.

Dilution

IHC-P~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MYC Antibody (T58) is for research use only and not for use in diagnostic or therapeutic procedures.

MYC Antibody (T58) - Protein Information

Name MYC

Synonyms BHLHE39

Function Transcription factor that binds DNA in a non-specific manner, yet also specifically recognizes the core sequence 5'-CAC[GA]TG-3' (PubMed:[24940000](#), PubMed:[25956029](#)). Activates the transcription of growth-related genes (PubMed:[24940000](#), PubMed:[25956029](#)). Binds to the VEGFA promoter, promoting VEGFA production and subsequent sprouting angiogenesis (PubMed:[24940000](#), PubMed:[25956029](#)). Regulator of somatic reprogramming, controls self-renewal of embryonic stem cells (By similarity). Functions with TAF6L to activate target gene expression through RNA polymerase II pause release (By similarity). Positively regulates transcription of HNRNPA1, HNRNPA2 and PTBP1 which in turn regulate splicing of pyruvate kinase PKM by binding repressively to sequences flanking PKM exon 9, inhibiting exon 9 inclusion and resulting in exon 10 inclusion and production of the PKM M2 isoform (PubMed:[20010808](#)).

Cellular Location

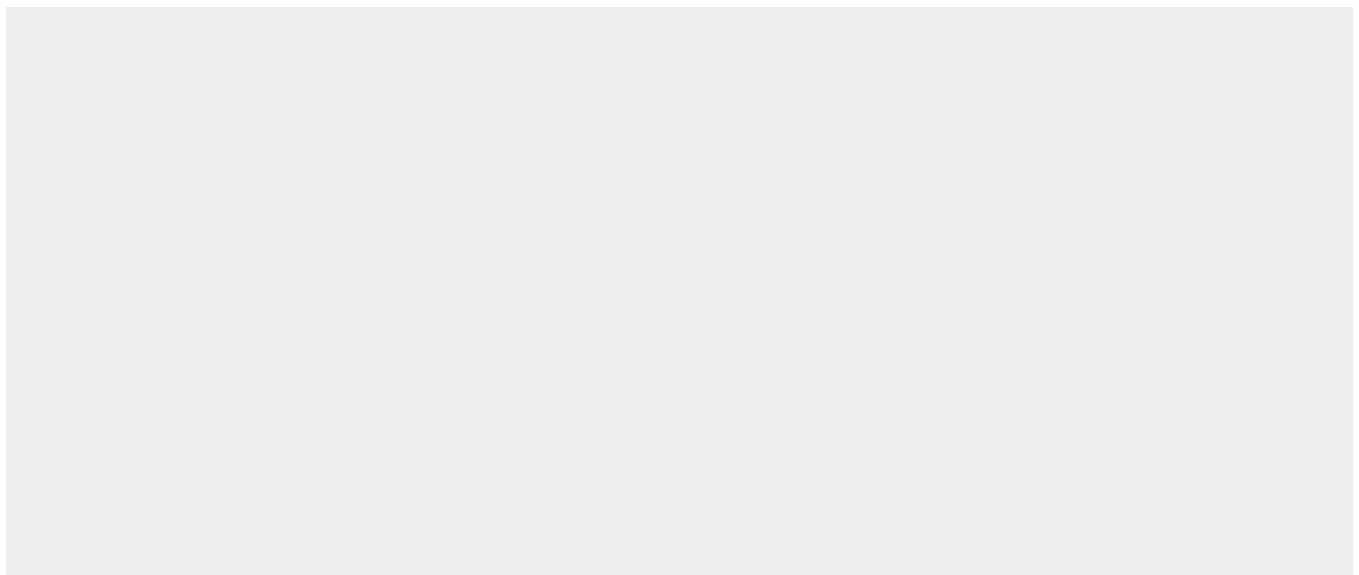
Nucleus, nucleoplasm. Nucleus, nucleolus. Nucleus. Cytoplasm Chromosome. Note=Association with chromatin is reduced by hyperphosphorylation (PubMed:30158517) Localization to the nucleolus is dependent on HEATR1 (PubMed:38225354)

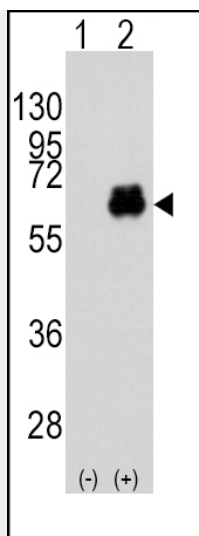
MYC Antibody (T58) - Protocols

Provided below are standard protocols that you may find useful for product applications.

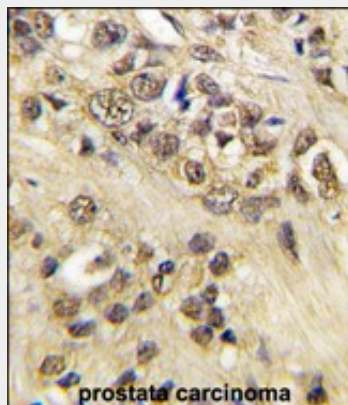
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MYC Antibody (T58) - Images





Western blot analysis of MYC (arrow) using rabbit polyclonal MYC Antibody (T58) (Cat.#AP1985d). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the MYC gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human prostate carcinoma tissue reacted with MYC Antibody (T58) (Cat.#AP1985d), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

MYC Antibody (T58) - Background

MYC 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 the gene encoding MYC 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.

MYC Antibody (T58) - References

- Lima,F.P., Am. J. Clin. Pathol. 129 (5), 723-726 (2008)
- Ida,C., Biosci. Biotechnol. Biochem. 72 (3), 868-871 (2008)
- Iijima,S., Eur. J. Biochem. 206 (2), 595-603 (1992)