

MYC Antibody (S62)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1985B

Specification

MYC Antibody (S62) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, FC,E <u>P01106</u> <u>P09416, 029031, P01108, 02HJ27, 028566</u> Human Bovine, Mouse, Pig, Rat, Sheep Rabbit Polyclonal Rabbit IgG 50565 40-69

MYC Antibody (S62) - 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 40-69 amino acids from human MYC.

Dilution WB~~1:1000 FC~~1:10~50 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 (S62) is for research use only and not for use in diagnostic or therapeutic procedures.

MYC Antibody (S62) - 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:<u>24940000</u>, PubMed:<u>25956029</u>). Activates the transcription of growth-related genes (PubMed:<u>24940000</u>, PubMed:<u>25956029</u>). Binds to the VEGFA promoter, promoting VEGFA production and subsequent sprouting angiogenesis (PubMed:<u>24940000</u>, PubMed:<u>25956029</u>). 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:<u>20010808</u>).

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 (S62) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MYC Antibody (S62) - Images



Western blot analysis of MYC (arrow) using rabbit polyclonal MYC Antibody (S62) (Cat.#AP1985b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the MYC gene (Lane 2) (Origene Technologies).





MYC-pS62 Antibody (Cat. #AP1985b) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

MYC Antibody (S62) - 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 (S62) - 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)