

MYC Antibody (T58) Blocking Peptide
Synthetic peptide
Catalog # BP1985d**Specification**

MYC Antibody (T58) Blocking Peptide - Product InformationPrimary Accession [P01106](#)**MYC Antibody (T58) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody [AP1985d](/product/products/AP1985d) was selected from the T58 region of human MYC. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MYC Antibody (T58) Blocking Peptide - 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](http://www.uniprot.org/citations/24940000), PubMed: [25956029](http://www.uniprot.org/citations/25956029)). Activates the transcription of growth-related genes (PubMed: [24940000](http://www.uniprot.org/citations/24940000), PubMed: [25956029](http://www.uniprot.org/citations/25956029)). Binds to the VEGFA promoter, promoting VEGFA production and subsequent sprouting angiogenesis (PubMed: [24940000](http://www.uniprot.org/citations/24940000), PubMed: [25956029](http://www.uniprot.org/citations/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 Note=Localization to the nucleolus is dependent on HEATR1

MYC Antibody (T58) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

MYC Antibody (T58) Blocking Peptide - Images

MYC Antibody (T58) Blocking Peptide - 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) Blocking Peptide - 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)