

Phospho-MYC(T58) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3325a**Specification**

Phospho-MYC(T58) Antibody Blocking peptide - Product InformationPrimary Accession [P01106](#)**Phospho-MYC(T58) Antibody 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 [AP3325a](/product/products/AP3325a) was selected from the region of human Phospho-MYC-T58. 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.

Phospho-MYC(T58) Antibody 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

Phospho-MYC(T58) Antibody Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Phospho-MYC(T58) Antibody Blocking peptide - Images**Phospho-MYC(T58) Antibody Blocking peptide - Background**

MYC participates in the regulation of gene transcription. It binds DNA both in a non-specific manner and also specifically to recognizes the core sequence 5'-CAC[GA]TG-3'. This protein appears to activate the transcription of growth-related genes. Overexpression of MYC is implicated in the etiology of a variety of hematopoietic tumors. A chromosomal aberration involving MYC may be a cause of a form of B-cell chronic lymphocytic leukemia.

Phospho-MYC(T58) Antibody Blocking peptide - References

Qi, Y., et al., Nature 431(7009):712-717 (2004). Wilda, M., et al., Genes Chromosomes Cancer 41(2):178-182 (2004). Dom, et al., Oncogene 23(44):7378-7390 (2004). Pap, T., et al., Arthritis Rheum. 50(9):2794-2802 (2004). Ozawa, N., et al., Endocrinology 145(9):4244-4250 (2004).