

Phospho-MYC-pS62 Blocking Peptide
Synthetic peptide
Catalog # BP3354a**Specification**

Phospho-MYC-pS62 Blocking Peptide - Product Information

Primary Accession [P01106](#)
Other Accession [P09416](#), [Q29031](#), [P01108](#), [Q2HJ27](#), [Q28566](#)

Phospho-MYC-pS62 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

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-pS62 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 Chromosome. Note=Association with chromatin is reduced by hyperphosphorylation (PubMed:30158517) Localization to the nucleolus is dependent on HEATR1 (PubMed:38225354)

Phospho-MYC-pS62 Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

Phospho-MYC-pS62 Blocking Peptide - Images

Phospho-MYC-pS62 Blocking Peptide - Background

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.

Phospho-MYC-pS62 Blocking Peptide - References

Coller,H.A., PLoS Genet. 3 (8), E146 (2007) Zippo,A., Nat. Cell Biol. 9 (8), 932-944 (2007) Dai,M.S., EMBO J. 26 (14), 3332-3345 (2007) Yuneva,M., J. Cell Biol. 178 (1), 93-105 (2007)