

Phospho-MAX(Y123) Blocking Peptide

Synthetic peptide Catalog # BP3355a

Specification

Phospho-MAX(Y123) Blocking Peptide - Product Information

Primary Accession

P61244

Phospho-MAX(Y123) Blocking Peptide - Additional Information

Gene ID 4149

Other Names

Protein max, Class D basic helix-loop-helix protein 4, bHLHd4, Myc-associated factor X, MAX, BHLHD4

Target/Specificity

The synthetic peptide sequence is selected from aa 116-130 of HUMAN MAX

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-MAX(Y123) Blocking Peptide - Protein Information

Name MAX (HGNC:6913)

Synonyms BHLHD4

Function

Transcription regulator. Forms a sequence-specific DNA- binding protein complex with MYC or MAD which recognizes the core sequence 5'-CAC[GA]TG-3'. The MYC:MAX complex is a transcriptional activator, whereas the MAD:MAX complex is a repressor. May repress transcription via the recruitment of a chromatin remodeling complex containing H3 'Lys-9' histone methyltransferase activity. Represses MYC transcriptional activity from E-box elements.

Cellular Location

Nucleus. Cell projection, dendrite.

Tissue Location

High levels found in the brain, heart and lung while lower levels are seen in the liver, kidney and skeletal muscle



Phospho-MAX(Y123) Blocking Peptide - Protocols

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

• Blocking Peptides

Phospho-MAX(Y123) Blocking Peptide - Images

Phospho-MAX(Y123) Blocking Peptide - Background

The protein encoded by this gene is a member of the basic helix-loop-helix leucine zipper (bHLHZ) family of transcription factors. It is able to form homodimers and heterodimers with other family members, which include Mad, Mxi1 and Myc. Myc is an oncoprotein implicated in cell proliferation, differentiation and apoptosis. The homodimers and heterodimers compete for a common DNA target site (the E box) and rearrangement among these dimer forms provides a complex system of transcriptional regulation. Multiple alternatively spliced transcript variants have been described for this gene but the full-length nature for some of them is unknown.

Phospho-MAX(Y123) Blocking Peptide - References

Faiola, F., Biochem. J. 403 (3), 397-407 (2007) Gordan, J.D., Cancer Cell 11 (4), 335-347 (2007) Fujii, M., Mol. Cell 24 (5), 771-783 (2006) Zada, A.A., Leukemia 20 (12), 2137-2146 (2006)