

MOX1 (Meox1) Blocking Peptide (C-term)

Synthetic peptide Catalog # BP7267b

Specification

MOX1 (Meox1) Blocking Peptide (C-term) - Product Information

Primary Accession P50221
Other Accession NP 004518

MOX1 (Meox1) Blocking Peptide (C-term) - Additional Information

Gene ID 4222

Other Names

Homeobox protein MOX-1, Mesenchyme homeobox 1, MEOX1, MOX1

Target/Specificity

The synthetic peptide sequence is selected from aa 238-254 of HUMAN MEOX1

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.

MOX1 (Meox1) Blocking Peptide (C-term) - Protein Information

Name MEOX1

Synonyms MOX1

Function

Mesodermal transcription factor that plays a key role in somitogenesis and is specifically required for sclerotome development. Required for maintenance of the sclerotome polarity and formation of the cranio-cervical joints (PubMed:23290072, PubMed:24073994). Binds specifically to the promoter of target genes and regulates their expression. Activates expression of NKX3-2 in the sclerotome. Activates expression of CDKN1A and CDKN2A in endothelial cells, acting as a regulator of vascular cell proliferation. While it activates CDKN1A in a DNA-dependent manner, it activates CDKN2A in a DNA-independent manner. Required for hematopoietic stem cell (HSCs) induction via its role in somitogenesis: specification of HSCs occurs via the deployment of a specific endothelial precursor population, which arises within a sub-compartment of the somite named endotome.



Cellular Location

 $Nucleus \ \{ECO:0000250|UniProtKB:P32442\}. \ Cytoplasm \ \{ECO:0000250|UniProtKB:P32442\}. \ Note=Localizes \ predominantly \ in the nucleus. \ \{ECO:0000250|UniProtKB:P32442\}. \ Note=Localizes \ predominantly \ in the nucleus. \ \{ECO:0000250|UniProtKB:P32442\}. \ Note=Localizes \ predominantly \ in the nucleus. \ \{ECO:0000250|UniProtKB:P32442\}. \ Note=Localizes \ predominantly \ in the nucleus. \ \{ECO:0000250|UniProtKB:P32442\}. \ Note=Localizes \ predominantly \ in the nucleus. \ \{ECO:0000250|UniProtKB:P32442\}. \ Note=Localizes \ predominantly \ in the nucleus. \ \{ECO:0000250|UniProtKB:P32442\}. \ Note=Localizes \ predominantly \ in the nucleus. \ \{ECO:0000250|UniProtKB:P32442\}. \ Note=Localizes \ predominantly \ in the nucleus. \ \{ECO:0000250|UniProtKB:P32442\}. \ Note=Localizes \ predominantly \ in the nucleus. \ \{ECO:0000250|UniProtKB:P32442\}. \ Note=Localizes \ predominantly \ in the nucleus. \ \{ECO:0000250|UniProtKB:P32442\}. \ Note=Localizes \ predominantly \ in the nucleus. \ Note=Localizes \ predominantly \ predominantl$

MOX1 (Meox1) Blocking Peptide (C-term) - Protocols

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

Blocking Peptides

MOX1 (Meox1) Blocking Peptide (C-term) - Images

MOX1 (Meox1) Blocking Peptide (C-term) - Background

Meox1 is a member of a subfamily of non-clustered, diverged, antennapedia-like homeobox-containing genes. This protein may play a role in the molecular signaling network regulating somite development.

MOX1 (Meox1) Blocking Peptide (C-term) - References

Vatanavicharn, N., Am. J. Med. Genet. A 143 (19), 2292-2302 (2007) Petropoulos, H., J. Biol. Chem. 279 (23), 23874-23881 (2004) Stelnicki, E.J., Differentiation 62 (1), 33-41 (1997) Futreal, P.A., Hum. Mol. Genet. 3 (8), 1359-1364 (1994)