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SIX1 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP21689c

Specification

SIX1 Blocking Peptide (Center) - Product Information

Primary Accession Q15475

SIX1 Blocking Peptide (Center) - Additional Information

Gene ID 6495

Other Names
Homeobox protein SIX1, Sine oculis homeobox homolog 1, SIX1

Target/Specificity
The synthetic peptide sequence is selected from aa 89-102 of HUMAN SIX1

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.

SIX1 Blocking Peptide (Center) - Protein Information

Name SIX1

Function
Transcription factor that is involved in the regulation of cell proliferation, apoptosis and embryonic development (By similarity). Plays an important role in the development of several organs, including kidney, muscle and inner ear (By similarity). Depending on context, functions as a transcriptional repressor or activator (By similarity). Lacks an activation domain, and requires interaction with EYA family members for transcription activation (PubMed:15141091). Mediates nuclear translocation of EYA1 and EYA2 (PubMed:19497856). Binds the 5'-TCA[AG][AG]TTNC-3' motif present in the MEF3 element in the MYOG promoter and CIDEA enhancer (PubMed:27923061, PubMed:23435380, PubMed:15141091, PubMed:19497856). Regulates the expression of numerous genes, including MYC, CCND1 and EZR (By similarity). Acts as an activator of the IGFBP5 promoter, probably coactivated

by EYA2 (By similarity). Repression of precursor cell proliferation in myoblasts is switched to activation through recruitment of EYA3 to the SIX1-DACH1 complex (By similarity). During myogenesis, seems to act together with EYA2 and DACH2 (By similarity). Regulates the expression of CCNA1 (PubMed:15123840). Promotes brown adipocyte differentiation (By similarity).

Cellular Location
Nucleus. Cytoplasm

Tissue Location
Specifically expressed in skeletal muscle.

SIX1 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides

SIX1 Blocking Peptide (Center) - Images

SIX1 Blocking Peptide (Center) - Background

Transcription factor that is involved in the regulation of cell proliferation, apoptosis and embryonic development. Plays an important role in the development of several organs, including kidney, muscle and inner ear. Depending on context, functions as transcriptional repressor or activator. Lacks an activation domain, and requires interaction with EYA family members for transcription activation. Mediates nuclear translocation of EYA1 and EYA2. Binds the 5'-TCA[AG][AG]TTNC-3' motif present in the MEF3 element in the MYOG promoter. Regulates the expression of numerous genes, including MYC, CCND1 and EZR. Acts as activator of the IGFBP5 promoter, probably coactivated by EYA2. Repression of precursor cell proliferation in myoblasts is switched to activation through recruitment of EYA3 to the SIX1-DACH1 complex. During myogenesis, seems to act together with EYA2 and DACH2 (By similarity). Regulates the expression of CCNA1.

SIX1 Blocking Peptide (Center) - References

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