

FOXO4 Blocking Peptide (C-term)

Synthetic peptide Catalog # BP21102a

Specification

FOXO4 Blocking Peptide (C-term) - Product Information

Primary Accession

P98177

FOXO4 Blocking Peptide (C-term) - Additional Information

Gene ID 4303

Other Names

Forkhead box protein O4, Fork head domain transcription factor AFX1, FOXO4, AFX, AFX1, MLLT7

Target/Specificity

The synthetic peptide sequence is selected from aa 415-430 of HUMAN FOXO4

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.

FOXO4 Blocking Peptide (C-term) - Protein Information

Name FOXO4

Synonyms AFX, AFX1, MLLT7

Function

Transcription factor involved in the regulation of the insulin signaling pathway. Binds to insulin-response elements (IREs) and can activate transcription of IGFBP1. Down-regulates expression of HIF1A and suppresses hypoxia-induced transcriptional activation of HIF1A-modulated genes. Also involved in negative regulation of the cell cycle. Involved in increased proteasome activity in embryonic stem cells (ESCs) by activating expression of PSMD11 in ESCs, leading to enhanced assembly of the 26S proteasome, followed by higher proteasome activity.

Cellular Location

Cytoplasm. Nucleus. Note=When phosphorylated, translocated from nucleus to cytoplasm. Dephosphorylation triggers nuclear translocation. Monoubiquitination increases nuclear localization. When deubiquitinated, translocated from nucleus to cytoplasm

Tissue Location



Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Isoform zeta is most abundant in the liver, kidney, and pancreas

FOXO4 Blocking Peptide (C-term) - Protocols

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

• Blocking Peptides

FOXO4 Blocking Peptide (C-term) - Images

FOXO4 Blocking Peptide (C-term) - Background

Transcription factor involved in the regulation of the insulin signaling pathway. Binds to insulin-response elements (IREs) and can activate transcription of IGFBP1. Down-regulates expression of HIF1A and suppresses hypoxia-induced transcriptional activation of HIF1A-modulated genes. Also involved in negative regulation of the cell cycle. Involved in increased proteasome activity in embryonic stem cells (ESCs) by activating expression of PSMD11 in ESCs, leading to enhanced assembly of the 26S proteasome, followed by higher proteasome activity.

FOXO4 Blocking Peptide (C-term) - References

Peters U., et al. Hum. Genet. 100:569-572(1997).
Borkhardt A., et al. Oncogene 14:195-202(1997).
Yang Z., et al. J. Biol. Chem. 277:8068-8075(2002).
Ross M.T., et al. Nature 434:325-337(2005).
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.