

MLLT7 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP6193a

Specification

MLLT7 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>P98177</u>

MLLT7 Antibody (N-term) Blocking Peptide - 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 used to generate the antibody AP6193a was selected from the N-term region of human MLLT7 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

MLLT7 Antibody (N-term) Blocking Peptide - 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

MLLT7 Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

MLLT7 Antibody (N-term) Blocking Peptide - Images

MLLT7 Antibody (N-term) Blocking Peptide - Background

The MLLT7 (Mixed-lineage leukemia translocated to 7) protein is a forkhead transcription factor that activates apoptosis by inducing the BCL-6 transcriptional repressor. MLL-MLLT7 fusion protein transformw myeloid progenitors and impairs forkhead protein function. MLLT7 is a target of the phosphatidylinositol 3-kinase/PKB insulin signaling pathway and the AMP-activated protein kinase-dependent pathway.

MLLT7 Antibody (N-term) Blocking Peptide - References

Crossley, L.J., J. Leukoc. Biol. 74(4):583-592 (2003).Tang, T.T., et al., J. Biol. Chem. 278(32):30125-30135 (2003).So, C.W., et al., Mol. Cell. Biol. 22(18):6542-6552 (2002).Tang, T.T., et al., J. Biol. Chem. 277(16):14255-14265 (2002).Kops, G.J., et al., Mol. Cell. Biol. 22(7):2025-2036 (2002).