

MLLT7 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6193a

Product Information

Application IHC-P, WB, E Primary Accession P98177

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 53684
Antigen Region 44-73

Additional Information

Gene ID 4303

Other Names Forkhead box protein O4, Fork head domain transcription factor AFX1,

FOXO4, AFX, AFX1, MLLT7

Target/Specificity This MLLT7 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 44-73 amino acids from the N-terminal

region of human MLLT7.

Dilution IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions MLLT7 Antibody (N-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

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

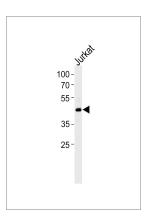
Background

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.

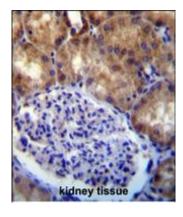
References

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).

Images



MLLT7 Antibody (R59) (Cat. #AP6193a) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the MLLT7 antibody detected the MLLT7 protein (arrow).



MLLT7 antibody (N-term) (Cat. #AP6193a)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of MLLT7 antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.