

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

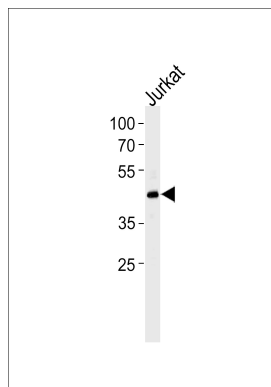
Background

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.

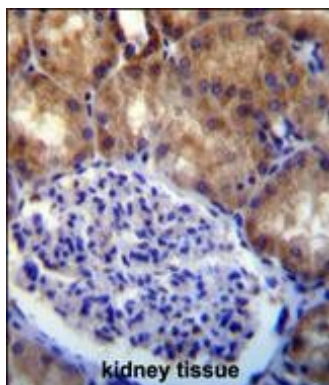
References

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'.