

## **MLLT7 Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6193a

## **Specification**

#### MLLT7 Antibody (N-term) - Product Information

WB, IHC-P,E Application **Primary Accession** P98177 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 53684 Antigen Region 44-73

## MLLT7 Antibody (N-term) - 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**

WB~~1:1000 IHC-P~~1:10~50

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.

## MLLT7 Antibody (N-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**

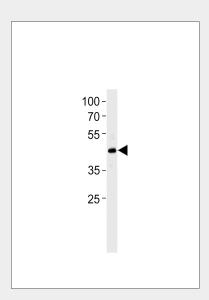
Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Isoform zeta is most abundant in the liver, kidney, and pancreas

#### **MLLT7 Antibody (N-term) - Protocols**

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

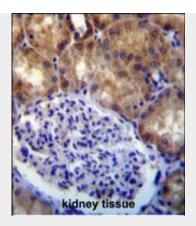
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# MLLT7 Antibody (N-term) - 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.

# MLLT7 Antibody (N-term) - 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) - 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).