

For Research Use Only

# Biotin-conjugated MLLT3/AF9 Polyclonal antibody

Catalog Number: Biotin-12825



## Basic Information

**Catalog Number:**

Biotin-12825

**Size:**

100ul , Concentration: 1000 ug/ml by  
Nanodrop;

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG3528

**GenBank Accession Number:**

BC036089

**GeneID (NCBI):**

4300

**UNIPROT ID:**

P42568

**Full Name:**

myeloid/lymphoid or mixed-lineage  
leukemia (trithorax homolog,  
Drosophila); translocated to, 3

**Calculated MW:**

568 aa, 63 kDa

**Observed MW:**

63-70 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

FC (Intra): 0.25 ug per 10<sup>6</sup> cells in a  
100 µl suspension

## Applications

**Tested Applications:**

FC (Intra)

**Species Specificity:**

human, mouse, rat

**Positive Controls:**

FC (Intra) : Jurkat cells,

## Background Information

MLLT3, also named as AF9, YEATS3, is a 568 amino acid protein, which is a component of the superelongation complex6 and co-operates with DOT1L, which di/trimethylates H3K79 to promote transcription. MLLT3 localizes to active transcription start sites (TSSs) through the YEATS domain, which recognizes active histone marks such as H3K9 acetylation and crotonylation. A truncated MLLT3 that lacks the YEATS domain forms a leukaemic fusion protein with the N terminus of MLL1, which misdirects MLLT3-interacting complexes to induce aberrant gene transcription. MLLT3 also regulates erythroid or megakaryocytic progenitors and was identified as a definitive HSC hub gene during mouse development. Researcher found that the expression of a gene called MLLT3 was closely correlated with blood stem cells'potential to self-renew and that the protein generated by the MLLT3 gene provides blood stem cells with the instructions necessary to maintain its ability to self-renew. It does this by working with other regulatory proteins to keep important parts of the blood stem cell's machinery operational as the cells divide.

## Storage

**Storage:**

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

**Storage Buffer:**

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

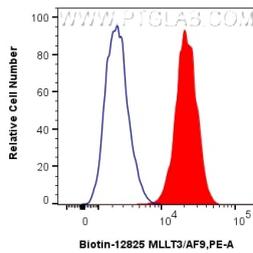
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## Selected Validation Data



$1 \times 10^6$  Jurkat cells were intracellularly stained with 0.25  $\mu$ g MLLT3/AF9 Polyclonal antibody (Biotin-12825) and Streptavidin-PE Conjugate (PE-PF00030)(red), or 0.25  $\mu$ g Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).