

# Datasheet for ABIN7561937 **AF9 Protein (AA 1-569) (His tag)**



### Overview

Quantity:	1 mg
Target:	AF9 (MLLT3)
Protein Characteristics:	AA 1-569
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This AF9 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Purpose:	Custom-made recombinat Mllt3 Protein expressed in mammalien cells.
Sequence:	MASSCAVQVK LELGHRAQVR KKPTVEGFTH DWMVFVRGPE HSNIQHFVEK VVFHLHESFP
	RPKRVCKDPP YKVEESGYAG FILPIEVYFK NKEEPKKVRF DYDLFLHLEG HPPVNHLRCE
	KLTFNNPTED FRRKLLKAGG DPNRSIHTSS SSSSSSSSS SSSSSSSS SSSSSSSSS
	SSSSSSSS TSFSKPHKLM KEHKEKPSKD SREHKSAFKE PSRDHNKSSK DSSKKPKENK
	PLKEEKIVPK MAFKEPKPMS KEPKADSNLL TVTSGQQDKK APSKRPPASD SEELSAKKRK
	KSSSEALFKS FSSAPPLILT CSADKKQIKD KSHVKMGKVK IESETSEKKK SMLPPFDDIV
	DPNDSDVEEN MSSKSDSEQP SPASSSSSS SSFTPSQTRQ QGPLRSIMKD LHSDDNEEES
	DEAEDNDNDS EMERPVNRGG SRSRRVSLSD GSDSESSSAS SPLHHEPPPP LLKTNNNQIL
	EVKSPIKQSK SDKQIKNGEC DKAYLDELVE LHRRLMTLRE RHILQQIVNL IEETGHFHIT
	NTTFDFDLCS LDKTTVRKLQ SYLETSGTS Sequence without tag. The proposed Purification-
	Tag is based on experiences with the expression system, a different complexity of the

# protein could make another tag necessary. In case you have a special request, please contact us. Characteristics: Key Benefits: · Made to order protein - from design to production - by highly experienced protein experts. · Protein expressed in mammalien cells and purified in one-step affinity chromatography · The optimized expression system ensures reliability for intracellular, secreted and

transmembrane proteins.

State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom cannot be expressed or purified.

made proteins from other companies is that there is no financial obligation in case the protein

Purity: > 90 % as determined by Bis-Tris Page, Western Blot

Grade: custom-made

# **Target Details**

Background:

Target:	AF9 (MLLT3)
Alternative Name:	MIlt3 (MLLT3 Products)

Protein AF-9 (Myeloid/lymphoid or mixed-lineage leukemia translocated to chromosome 3 protein homolog), FUNCTION: Chromatin reader component of the super elongation complex (SEC), a complex required to increase the catalytic rate of RNA polymerase II transcription by suppressing transient pausing by the polymerase at multiple sites along the DNA. Specifically recognizes and binds acylated histone H3, with a preference for histone H3 that is crotonylated. Crotonylation marks active promoters and enhancers and confers resistance to transcriptional repressors. Recognizes and binds histone H3 crotonylated at 'Lys-9' (H3K9cr), and with slightly lower affinity histone H3 crotonylated at 'Lys-18' (H3K18cr). Also recognizes and binds histone H3 acetylated and butyrylated at 'Lys-9' (H3K9ac and H3K9bu, respectively), but with lower affinity than crotonylated histone H3. In the SEC complex, MLLT3 is required to recruit the complex to crotonylated histones. Recruitment of the SEC complex to crotonylated histones

#### **Target Details**

promotes recruitment of DOT1L on active chromatin to deposit histone H3 'Lys-79' methylation (H3K79me). Plays a key role in hematopoietic stem cell (HSC) maintenance by preserving, rather than conferring, HSC stemness. Acts by binding to the transcription start site of active genes in HSCs and sustaining level of H3K79me2, probably by recruiting DOT1L. {ECO:0000250|UniProtKB:P42568}.

Molecular Weight:

63.4 kDa

UniProt:

A2AM29

# **Application Details**

Application Notes:

In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions:

For Research Use only

12 months

#### Handling

Expiry Date:

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.