

# Product datasheet for RC206283L3

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## AF9 (MLLT3) (NM\_004529) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** AF9 (MLLT3) (NM\_004529) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: AF9

Synonyms: AF9; YEATS3

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC206283).

Sgfl-Mlul

Sequence:

Restriction Sites: Cloning Scheme:

Cloning sites used for ORF Shuttling:





 $<sup>\</sup>ensuremath{^*}$  The last codon before the Stop codon of the ORF.

**ACCN:** NM\_004529

ORF Size: 1704 bp



### AF9 (MLLT3) (NM\_004529) Human Tagged Lenti ORF Clone - RC206283L3

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** <u>NM 004529.1</u>

 RefSeq Size:
 6787 bp

 RefSeq ORF:
 1707 bp

 Locus ID:
 4300

 UniProt ID:
 P42568

**Cytogenetics:** 9p21.3

**Domains:** YEATS

**Protein Families:** Transcription Factors

**MW:** 63.3 kDa

**Gene Summary:** 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 (PubMed:20159561,

PubMed:20471948, PubMed:25417107, PubMed:27105114, PubMed:27545619). Specifically recognizes and binds acylated histone H3, with a marked preference for histone H3 that is crotonylated (PubMed:25417107, PubMed:27105114, PubMed:27545619). Crotonylation marks active promoters and enhancers and confers resistance to transcriptional repressors (PubMed:25417107, PubMed:27105114, PubMed:27545619). Recognizes and binds histone H3 crotonylated at 'Lys-9' (H3K9cr), and with slightly lower affinity histone H3 crotonylated at 'Lys-18' (H3K18cr) (PubMed:27105114). Also recognizes and binds histone H3 acetylated at 'Lys-9' (H3K9ac), but with lower affinity than crotonylated histone H3 (PubMed:25417107, PubMed:27105114). In the SEC complex, MLLT3 is required to recruit the complex to crotonylated histones (PubMed:27105114, PubMed:27545619).[UniProtKB/Swiss-Prot

Function]