

## Product datasheet for **RG213269**

### LAF4 (AFF3) (NM\_001025108) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	LAF4 (AFF3) (NM_001025108) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AFF3
Synonyms:	KINS; LAF4; MLLT2-like
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213269 representing NM_001025108 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACAGCTTCGACTTAGCCCTGCTCCAGGAATGGGACCTCGAGTCACTGTGGGGTGAAGACATCTTAA  
ACCAGAGGAATGACTCTCTAGTTGTGGAATTCAGTCATCAGCCAGCAGATGCAGGAGTGTCTATGAACC  
AGATAGAAATGCATTACGGAGGAAAGAACGAGAAAGAAGAAATCAAGAACTCAACAGGATGATGGCAGC  
TTAATTCTAGTTACTCTCTTTCAGTGAGCCCTACAAGACTAACAGGGGGATGAACTCTCCAACCGGA  
TCCAGAACAACCTTAGGCAATTATGATGAAATGAAAGACTTTTTAACTGATAGATCCAATCAGAGTCACT  
CGTTGGAGTTCCTCAACCTGGGGTTCCTCAGACTCCTGTGAACAAGATCGATGAACATTTTGTTCAGAT  
TCAAGAGCCCAGAACCCAGCCCTCGTCTATCTGTAGCACTACAACCTCCACACCAGCAGCTGTCCCGTGC  
AGCAGAGTAAGAGAGGCACTATGGGCTGGCAGAAGGCTGGGCACCCACCTCTGACGGCCAAACAGAGAGC  
AACACAACAGGGCTCTCTCAGGACCTTGCTTGGAGATGGTGTGGCAGACAGCAGCTCGGGCCAAACAA  
GTGTGCAATGTGGAGGTGGGCCTCAGACCCAGGAGAGGCCACCTGCCATGGCGGCCAAGCACAGCAGCA  
GCGGACACTGTGTTGAGAACTTTCCTCCATCCCTAGCTTCAAACCCAGCCTGGTCCAGCAGAAACCGAC  
CGCGTATGTGAGGCCAATGGACGGCCAAGATCAGGCCCTGATGAGTCTCCTAAGCTGAAGTCGTCTTCG  
GAAACCAGCGTGCATGCACATCATAAGGGGAGTCCCTGCCAGCAAGCCGGAGCCTGCCAGAGCCAAAGG  
CCAAGCTCTCAAAGTTCAGCATCCCCAAGCAGGGGAGGAGAGTATGATCTGGAGAAACCAACAGCTGTGT  
TGAAGAAATAATCCGGGAGATGACCTGGCTTCCACCACCTTCTGTATTCAAGCAGCTGGCAAAGTGGAA  
CCAACCAATTTCCATTTCCAAATAAGGACTCTCAGCTTGTATCCTCTGGACACAATAATCCAAAGAAAG  
GTGATGCAGAGCCAGAGAGTCCAGACAATGGCACATCGAATACATCAATGCTGGAAGATGACCTTAAGCT  
AAGCAGTATGAAGAGGAGAATGAACAGCAGGCAGCTCAGAGAACGGCTCTCCGCGCTCTCTGACAGC  
GCCGTGGTCCAGCAGCCAACTGCAGAACCTCGGTGCCTCCAGCAAGGGCAGCAGCAGCAGCAGCAGCA  
GCGGCAGCAGCAGCTCCTCCAGCGACTCAGAGAGCAGCTCCGGATCTGACTCGGAGACCGAGAGCAGCTC  
CAGCGAGAGTGAAGGCAGCAAGCCCCCACTTCTCCAGCCCCGAGGCTGAACCGGCATCCTCTAACAAAG



[View online >](#)

TGGCAGCTGGATAAATGGCTAAACAAAGTTAATCCCCACAAGCCTCCTATTCTGATCCAAAATGAAAGCC  
ACGGGTGAGAGCAATCAGTACTACAACCCGGTAAAAGAGGACGTCCAGGACTGTGGGAAAGTCCCCGA  
CGTTTGCCAGCCCAGCCTGAGAGAGAAGGAGATCAAGAGCACTTGCAAGGAGGAGCAAAGGCCAAGGACA  
GCCAACAAAGGCCCTGGGAGTAAAGCGGTGAAGCAGAAGTCCCCGCCCGGGCCGTGGCCGTGGCGGTGA  
GCGCAGCCGCCCGCCACCCGAGTGCCTGTGCGCCCGGAGAACGCGCCCGCCCTGCCCGGAGGTC  
GAGGAGCCCGCGCCCGGACGCGTGGGACGAGCGTGGTGGTCCCGCCGAGCCCAAACAAAGCCAGGC  
CCTGTGGCAACAACAGAGCGAGCCACCGCAAGGAGCTGCGCTCCTCCGTGACCTGCGAGAAGCGCCGCAC  
CGGGGGCTAAGCAGGATCGTCCCCAAATCCAAGGAGTTCATTGAGACAGAGTCGTCATCTTCATCTCC  
TCCTCGGACTCCGACCTGGAGTCCGAGCAGGAGGAGTACCCTCTGTCCAAAGCACAGACCGTGGCTGCCT  
CTGCCTCCTCCGGGAATGATCAGAGGCTGAAGGAGGCCGCTGCCAACGGGGGAGTGGTCTAGGGCCCC  
TGTAGGCTCCATCAACGCCAGGACCACAGTGACATCGCCAAGGAGCTGGAGGAGCAGTTCTACACTG  
GTCCCTTTGGCCGAACGAATTCTCTCCCTCTAAAGGACAGTGATGAGATCAGGTCTCTCTGGGTCA  
AAATCGACCTGACCTCCTGTCCAGGATCCAGAACACCTGCCCCAGGAGCCAGGGGATTGAGCGCCCC  
TGCCACCAAGGACTCTGAGAGCGCACCGCCAGCCACACCTCGGACACACCTGCAGAAAAGGCTTTGCCA  
AAATCCAAGAGGAAACGCAAGTGTGACAACGAAGCAGCTACAGGGAGATCAAGAAGTCCCAGGGAGAGA  
AAGACAGCTCTTCAAGACTGGCCACCTCCACCAGTAATACTTTGTCTGCAAACCACTGCAACATGAACAT  
CAACAGTGTGGCAATACCAATAAATAAAAAATGAAAAATGCTTCGGTCGCCCATCTCACCCCTCTCTGAT  
GCATCTAAACACAATAACACCAGCGAGGACTTAACTTCTCCAGCCGACCTAATGGCAACAGTTTGTTTA  
CTTCAGCTCTTCCAGCAAAAAGCCTAAGGCCGACAGCCAGCTGCAGCCTCACGGCGGAGACCTCACGAA  
AGCAGCTCACAACAATTCTGAAAACATTCCTCCACAAGTCACGGCCGAGACGAAGCCGTGGTCTCCA  
GGCTCCAACGGCCACAGGACTGCAAGAGGCAGAACTTGTCTTCGATGATATGCCTCGCAGTCCCGATT  
GAACTATGCTGAAGCAGCATTGTCGTTTATCGAGTGTGGAATGCAATGGAACAAGGCCCATGGAATCC  
AAATCTCCTTATACGATGTATTCAGAAACAGTAGAGCTCATCAGGTATGCTATGAGACTAAAAACCACT  
CAGGCCCAATGCCACACCAGAAGACAAACAAGTGGTGCATTATGTTACCGATGCCTGGCCCTCTGTGA  
CTGGCGGATGTTTCGACTCAAAAGGGACCACGCTGTAAGTATTCAAAGCACTAATCGACTATTTCAAG  
AACTCATCTAAAGCCGCCAAGCCCATCTCCGTGGGGGCCAGTGAAAGAGCACTGGAACCCCATCCC  
CCATGTCTCCCAACCCCTCTCCCGCCAGCTCCGTGGGGTCTCAGGGCAGCCTCTCCAACGCCAGCGCCCT  
GTCCCGTCCGACCATCGTCAGCATCCACAGCGCATCCACCAGATGGCGCCAACCACGTCAGCATCACC  
AACAGCATCCTGCACAGCTACGACTACTGGGAGATGGCCGACAACCTGGCCAAGGAAAACCGAGAATTCT  
TCAACGACCTGGATCTGCTCATGGGGCCGGTACCCTGCACAGCAGCATGGAGCAGCTGGTCCAGTACTC  
CCAACAGGGCCTGCACTGGCTGCGGAACAGCGCCACCTGTCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG213269 representing NM\_001025108  
 Red=Cloning site Green=Tags(s)

MDSFDLALLQEWDLESLWGEDI LNQRNDSL VVEFQSSASRCRSVYEPDRNALRRKERERRNQETQQDDGT  
 FNSSYSL FSEPYKTNKGDEL SNRIQNTL GNYDEMKDFL TDRSNQSHL VGVPKPGVPQTPVNKIDEHFVAD  
 SRAQNQSSICSTTTSTPAAVPVQQSKRGTMGWQKAGHPPSDGQQRATQQGSLRLLTLLGDGVGRQQPRAKQ  
 VCNVEVGLQTQERPPAMA AKHSSSGHC VQNFPPSLASKPSLVQQKPTAYVRPMDGQDQAPDESPK LKSSS  
 ETSVHCTSYRGPASKPEPARAKAKLSKFSIPKQGEESRSGETNSCVVEE IIREMTWLPPLSAIQAPGKVE  
 PTKFFPNKDSQLVSSGHNNPKKGAEPESPDNGT SNTSMLEDDLKLSDEEENEQAAQRTALRALSDS  
 AVVQQPNCR TSVPSKGS SSSSSSSGSSSSSSDSESSSGSDSETESSSESESGKPPHFSSPEAEPASSNK  
 WQLDKWLNKVNPHKPPILIQNESHGSESNQYYNPVKEDVQDCGKVPDVCQPSLREKEIKSTCKEEQRPT  
 ANKAPGSKGVKQKSPAAVAVAVSAAAPPAVPCAPAEAPARRSAGKKPTRRTERTSAGDGANCHRP  
 EEPAAADALGTSVVVPEPTKTRPCGNRASHRKELRSSVPTCEKRRTRGLSRIVPKSKEFIETESSSSSS  
 SSDSDL ESEQEEYPLSKAQTVAA SASSGNDQRLKEAAANGSGPRAPVGSINARTTSDIAKELEE QFYTL  
 VPFGRNELL SPLKDSDEIRSLWVKIDL TLLSRIPEHLPQEPGVL SAPATKDESEAPPSTSDTPAEKALP  
 KSKRKRKCDNEDDYREIKKSQGEK DSSSRLATSTNTLSANHCNMNINSVAIPINKNEKMLRSPISPLSD  
 ASKHKYTSEDLTSSSRPNGNSLFTSASSSKPKADS QLPHGDLTKAAHNSENIP LKHSRPTKWPSP  
 GSNHRDCKRQKLVFDDMPRSADYFMQEAKRMKHKADAMVEKFGKALNYEAALSFIECGNAMEQGPMS  
 KSPYTMYS ETVELIRYAMRLKTHSGPNATPEDKQLAALCYRCLALLYWRMFRLKRDHAVKYSKALIDYFK  
 NSSKAAQAPSPWGASGKSTGTPSPMSPNPSPASSVGSQGSLSNASALSPSTIVSIPQRIHQMAANHSVIT  
 NSILHSYDYWEMADNLAKENREFFNDL DLLMGPVTLHSSMEHLVQYSQQGLHWRNSAHL

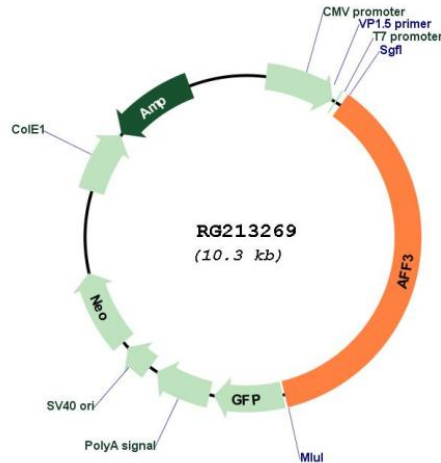
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_001025108

**ORF Size:** 3753 bp

**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:** [NM\\_001025108.2](#)

**RefSeq Size:** 8136 bp

**RefSeq ORF:** 3756 bp

**Locus ID:** 3899

**UniProt ID:** [P51826](#)

**Cytogenetics:** 2q11.2

**Protein Families:** Transcription Factors

**Gene Summary:** This gene encodes a tissue-restricted nuclear transcriptional activator that is preferentially expressed in lymphoid tissue. Isolation of this protein initially defined a highly conserved LAF4/MLLT2 gene family of nuclear transcription factors that may function in lymphoid development and oncogenesis. In some ALL patients, this gene has been found fused to the gene for MLL. Multiple alternatively spliced transcript variants that encode different proteins have been found for this gene. [provided by RefSeq, Jul 2008]