

Product datasheet for **RR201965**

Lair1 (NM_001029928) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lair1 (NM_001029928) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Lair1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR201965 representing NM_001029928 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGCCACTTCATTCTGTCATCGTGGTGGTGTACTGTGCTGGGATGGAAAAGTAACACACAGGAGG
AATCTCTGTCCGATTTCACTATCTGCGCTGAGCCAGGTCCTGTGATTCCTCAAGGAATTCATAACCAT
TGTGTGCTCAACCTCTGGTGAATATGACACGGTCCGCCTGGAGAAGGAAGGCAGCACCTTTATGGAAAAG
AAAACAGAGCCTCATGGAAAACAGCATAGATTCGGTATTGGGCCAGTGAATGAAACCATTACTGGATATT
ATAACTGTATCTTTGAAAAAATTATGTATGGTCTCAACGAAGTAATGATCTGCAGCTAAAAGTGATCAA
AGAAAATGTCACCCAGGGTCTTGCCCCAGGTCCATCAATGACCTCAGATACATCTTGCGTGAAGACGTAC
AGCATTACATTCTTACTGTGGTCTCTGTGATTTTCTCCTTTGTCTTTCCCTCTTTCTATTCTGCTTTT
TTAGCCACCGTCAGAAAAGCAGGGACTTCAAACAATAAGAGCCAGCATCAGAGGTCACAGGAGAGGCT
CAACCTAGCTACTAATGGCCTGGAGAAGACATCAGACATAGTCATGGATGACAGCCTTTCTGAGGACAGA
CAGACAGAACTTGGACCCAGTTGCAGGAGATCTTCAGGAGGTGACATATGCCAGCTGGACCATGACT
CCCTCACAAAAGGACTGTTAAAGATGTGACCCACAGAACAGAGTTATCATGGCTGAGTCCAGTACATA
TGCAGCCATCATGAGATGCTGCAGCCATCATGAGATGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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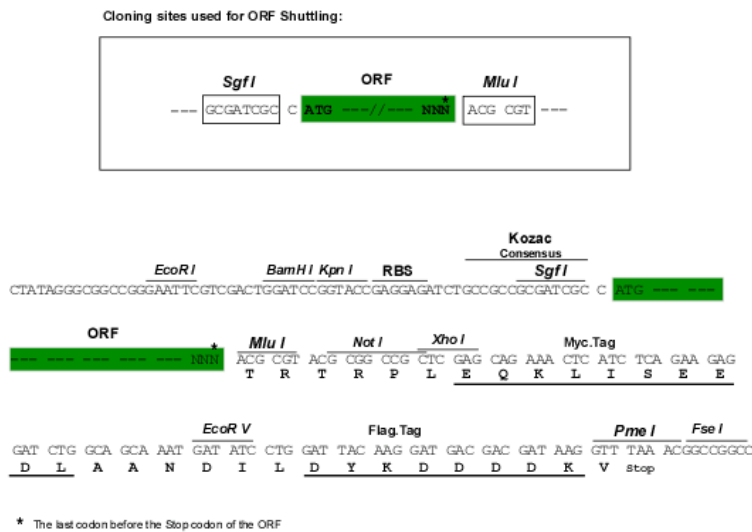
Protein Sequence: >RR201965 representing NM_001029928
 Red=Cloning site Green=Tags(s)

MPLHSVIVLVLVLC LGWKSNTQEESLSDFTICAEPGPVIPQGNFITIVCSTSGEYDTRVLEKEGSTFMEK
 KTEPHGKQHRFRIGPVNETITGYNCIFEKNYVWSQRSNDLQKVIKENVTQGLAPGSMSTSDTSWLKTY
 SIHILTVVSVIFLLCLSLFLFCFLSHRQKKQGLPNNKSOHQRSQERLNLATNGLEKTSDIVMDDSLSEDR
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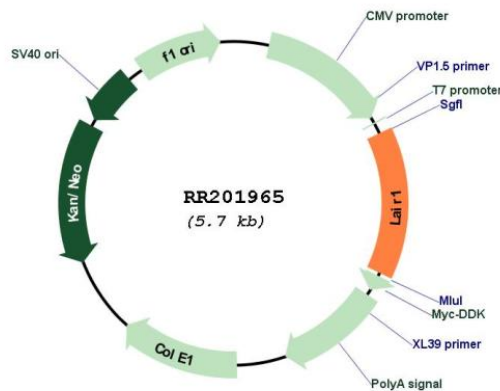
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001029928

ORF Size: 789 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:	<ol style="list-style-type: none">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 Size:	854 bp
RefSeq ORF:	792 bp
Locus ID:	574531
UniProt ID:	P0C1X9
Cytogenetics:	1q21
MW:	29.7 kDa
Gene Summary:	Functions as an inhibitory receptor that plays a constitutive negative regulatory role on cytolytic function of natural killer (NK) cells, B-cells and T-cells. Activation by Tyr phosphorylation results in recruitment and activation of the phosphatases PTPN6 and PTPN11. It also reduces the increase of intracellular calcium evoked by B-cell receptor ligation. May also play its inhibitory role independently of SH2-containing phosphatases. Modulates cytokine production in CD4+ T-cells, down-regulating IL2 and IFNG production while inducing secretion of transforming growth factor beta. Down-regulates also IgG and IgE production in B-cells as well as IL8, IL10 and TNF secretion. Inhibits proliferation and induces apoptosis in myeloid leukemia cell lines as well as prevents nuclear translocation of NF-kappa-B p65 subunit/RELA and phosphorylation of I-kappa-B alpha/CHUK in these cells. Inhibits the differentiation of peripheral blood precursors towards dendritic cells (By similarity).[UniProtKB/Swiss-Prot Function]