

## **Product datasheet for MC225704**

## Lair1 (NM 001302677) Mouse Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Lair1 (NM\_001302677) Mouse Untagged Clone

Tag: Tag Free
Symbol: Lair1

**Synonyms:** 5133400O11Rik; BB115266; D7Bwg0421e; Lair-1

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF: >MC225704 representing NM\_001302677

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTCACTTCATCCAGTTATCCTGCTGGTGCTTGTGCTGTGCCTGGGATGGAAAATTAACACACAGGAGG GACTCCCAAACAACAAAAGACAGCAGCAGCAGAGGCCAGAAGAGAGGGCTAAATCTAGCTACTAATGGCCTGGA GATGACTCCAGACATAGTTGCAGATGACAGGCTTCCTGAGGACAGATGGACAGAAACCTGGACCCCAGTT GCAGGAGACCTTCAAGAGGTGACGTATATCCAGCTGGACCATCACTCCCTCACACAGAGGGCAGTCGGAG CTGTGACCTCACAGAGCACAGATATGGCTGAGTCCAGCACATATGCAGCCATCATCAGACACTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_001302677

**Insert Size:** 345 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal

tag.



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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.

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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 001302677.1</u>, <u>NP 001289606.1</u>

 RefSeq Size:
 3065 bp

 RefSeq ORF:
 345 bp

 Locus ID:
 52855

 UniProt ID:
 Q8BG84

 Cytogenetics:
 7 2.31 cM

**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]

Transcript Variant: This variant (d) lacks two in-frame exons in the coding region compared to

variant a. It encodes isoform d, which is shorter than isoform a.