

Product datasheet for MR222405

Lancl1 (NM_021295) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lancl1 (NM_021295) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Lancl1
Synonyms:	AW124738; Gpr69; Gpr69a; p40
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR222405 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTCAGAGGGCCTTTCCGAATCCTTATGCCGATTATAACAAGTCGCTGGCCGAAAACACTTTGATT
CTACTGGGAGGCTGACTCCTGAGTTCTCACATCGCTTGACCAATAAGATCCGAGAGCTCCTTCAGCAAAT
GGAGAGAGGCCTAAAGTCTGCAGACCCTCGGGATGGCACTGGGTACACTGGCTGGCAGGCATCGCTGTG
CTTTACCTCCACCTCCACAATGTGTTTGGGACCCAGCCTATCTACAGATGGCGCACAGCTATGTAAGC
AAAGCCTCAACTGTCTGAGCAGGCGTTCATCACCTTCCTGTGTGGCGATGCGGGCCCCCTGGCTGTGGC
TGCTGTGCTGTACCACAAGATGAACAGTGAGAAGCAGGCCGAGGAGTGCATCACACGGCTCATTCACCTA
AATAAGATTGATCCCCACGTACCAAATGAAATGCTCTATGGCCGCATAGGCTACATCTTTGCTCTGCTTT
TTGTCAATAAGAACTTTGGAGAGGAGAAGATTCCTCAGAGCCATATTCAGCAGATTTGTGAAAACATCTT
AACCTCTGGGGAAAACCTATCTAGAAAGAGAAAACCTGGCGGCAAAGTCTCCACTGATGTATGAGTGGTAC
CAGGAATATTACGTGGGGGCTGCTCATGGCTTGGCAGGCATTTATTACTACCTGATGCAGCCCAGCCTTC
AGGTGAACCAAGGAAAGTTGCATAGTTTGGTGAAGCCAGTGTAGACTTTGTCTGCCGGTGAAGTTTCC
TTCCGGCAATTACCCTCCATGTTTGGATGATACCAGAGACCTGCTTGCCATTGGTGCCACGGTGCCTCT
GGGTCATCTATATGCTCATCCAAGCATACAAGTGTTCAAAGAAGAGCGTTACCTGTGTGATGCCCAGC
AGTGTGCTGACGTGATCTGGCAGTACGGGCTACTGAAGAAGGGCTACGGGCTGTGCCATGGTGTGCAGG
GAATGCCTACGCTTTCTGGCACTCTAACCTCACACAGGATCTGAAGTATCTGTACAGGGCCTGCAAG
TTTGCTGAGTGGTCTTAGACTACGGGAGCACGGATGCAGGACAGCGGACACCCCTTCTCCCTTTTG
AAGGGATGGCTGGAACAATATATTTCTGGCTGACCTGTTAGTCCCCACAAGGCCAAGTTCCTGCATT
TGAACT

ACGCGTACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR222405 protein sequence
 Red=Cloning site Green=Tags(s)

MAQRAFPNPYADYNKSLAENYFDSTGRL TPEFSHRL TNKIRELLQQMERGLKSADPRDGTGYTGWAGIAV
 LYLHLHNVFQDPAYLQMAHSYVKQSLNCLSRRSITFLCGDAGPLAVAAYLYHKMNSEKQAEECITRLIHL
 NKIDPHVPMNEMLYGRIGYIFALLFVNKNFGEEKIPQSHIQICENILTSGENLSRKRNLAAKSPLMYEWY
 QEYYVGAHGLAGIYYLQPSLQVQKGLHSLVKPSVDFVCRCLKFSPGNYPCLDDTRDLLVHWCHGAP
 GVIYMLIQAYKVFKEERYLCDAQQCADVIWQYGLLKKGYGLCHGAAGNAYAF LALYNLTQDLKYL YRACK
 FAEWCLDYGEHGCR TADTPFSLFEGMAGTIYFLADLLVPTKAKFP AFEL

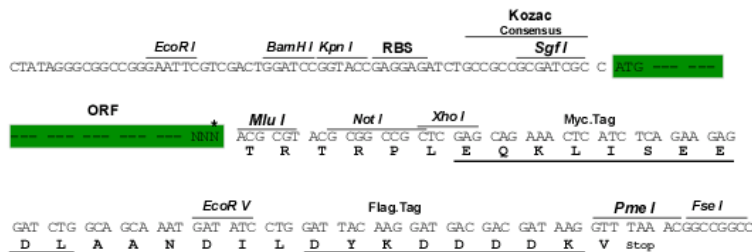
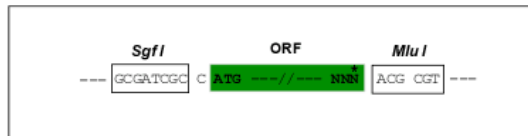
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_021295

ORF Size: 1197 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_021295.3](#), [NP_067270.1](#)

RefSeq Size: 4277 bp

RefSeq ORF: 1200 bp

Locus ID: 14768

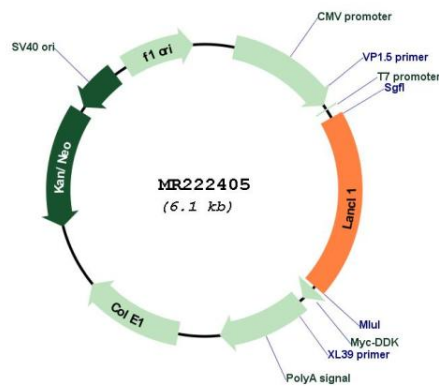
UniProt ID: [O89112](#)

Cytogenetics: 1 C3

MW: 45.3 kDa

Gene Summary: Functions as glutathione transferase (PubMed:25158856). Catalyzes conjugation of the glutathione (GSH) to artificial substrates 1-chloro-2,4-dinitrobenzene (CDNB) and p-nitrophenyl acetate (PubMed:25158856). Mitigates neuronal oxidative stress during normal postnatal development and in response to oxidative stresses probably through GSH antioxidant defense mechanism (PubMed:25158856). May play a role in EPS8 signaling. Binds glutathione (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222405