

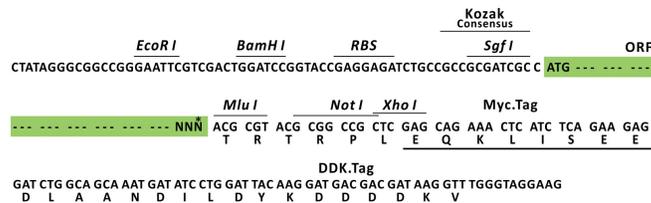
Product datasheet for MR227038L3

Isl1 (NM_021459) Mouse Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Isl1 (NM_021459) Mouse Tagged Lenti ORF Clone
Tag:	Myc-DDK
Symbol:	Isl1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR227038).
Restriction Sites:	Sgfl-MluI
Cloning Scheme:	

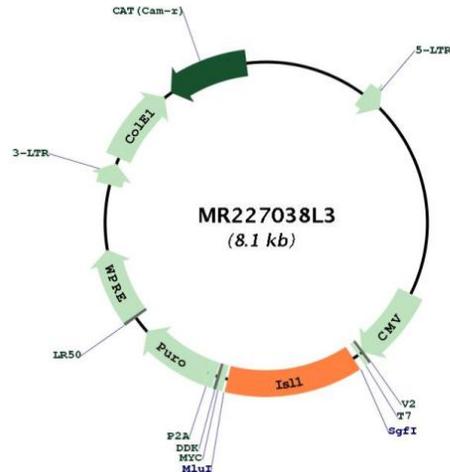
Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.



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Plasmid Map:


ACCN: NM_021459

ORF Size: 1050 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_021459.4](#), [NP_067434.3](#)

RefSeq Size: 2526 bp

RefSeq ORF: 1050 bp

Locus ID: 16392

UniProt ID: [P61372](#)

Cytogenetics: 13 D2.2

Gene Summary: DNA-binding transcriptional activator (PubMed:14664703, PubMed:24643061, PubMed:25775587, PubMed:22343712). Recognizes and binds to the consensus octamer binding site 5'-ATAATTAA-3' in promoter of target genes (PubMed:24643061, PubMed:25775587). Plays a fundamental role in the gene regulatory network essential for retinal ganglion cell (RGC) differentiation (PubMed:25775587). Cooperates with the transcription factor POU4F2 to achieve maximal levels of expression of RGC target genes and RGC fate specification in the developing retina (PubMed:24643061, PubMed:25775587). Involved in the specification of motor neurons in cooperation with LHX3 and LDB1 (PubMed:18583962). Binds to insulin gene enhancer sequences (By similarity). Essential for heart development. Marker of one progenitor cell population that give rise to the outflow tract, right ventricle, a subset of left ventricular cells, and a large number of atrial cells as well, its function is required for these progenitors to contribute to the heart. Controls the expression of FGF and BMP growth factors in this cell population and is required for proliferation and survival of cells within pharyngeal foregut endoderm and adjacent splanchnic mesoderm as well as for migration of cardiac progenitors into the heart (PubMed:14667410).[UniProtKB/Swiss-Prot Function]