

Product datasheet for **MR227038L3V**

Isl1 (NM_021459) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Isl1 (NM_021459) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Isl1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_021459
ORF Size:	1050 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR227038).
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.
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



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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]