

Product datasheet for **RC206893**

Islet 1 (ISL1) (NM_002202) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Islet 1 (ISL1) (NM_002202) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Islet 1
Synonyms:	Isl-1; ISLET1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206893 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGAGACATGGGAGATCCACCAAAAAAAAAACGTCTGATTTCCCTATGTGTTGGTTGCGGCAATCAGA
TTCACGATCAGTATATTCTGAGGGTTTCTCCGGATTTGGAATGGCATGCGGCATGTTTGAATGTGCGGA
GTGTAATCAGTATTTGGACGAGAGCTGTACATGCTTTGTAGGGATGGGAAAACCTACTGTAAAAGAGAT
TATATCAGGTTGTACGGGATCAAATGCGCCAAGTGCAGCATCGGCTTCAGCAAGAACGACTTCGTGATGC
GTGCCCGCTCCAAGGTGTATCACATCGAGTGTTTCCGCTGTGTGGCTGCAGCCGCCAGCTCATCCCTGG
GGACGAATTTGCGCTTCGGGAGGACGGTCTCTTCTGCCGAGCAGACCACGATGTGGTGGAGAGGGCCAGT
CTAGGCGCTGGCGACCCGCTCAGTCCCCTGCATCCAGCGCGGCCACTGCAAATGGCAGCGGAGCCCATCT
CCGCCAGGCAGCCGGCCCTGCGGCCACGTCCACAAGCAGCCGGAGAAGACCACCCGCGTGCAGGACTGT
GCTGAACGAGAAGCAGCTGCACACCTTGCAGCCTGCTACGCCGCAAACCCGCGGCCAGATGCGCTCATG
AAGGAGCAACTGGTAGAGATGACGGGCTCAGTCCCCGTGTATCCGGTCTGGTTTCAAAAACAGCGGT
GCAAGGACAAGAAGCGAAGCATCATGATGAAGCAACTCCAGCAGCAGCAGCCCAATGACAAAACATAAT
CCAGGGGATGACAGGAACCTCCATGGTGGCTGCCAGTCCAGAGAGACACGACGGTGGCTTACAGGCTAAC
CCAGTGGAAAGTACAAAGTTACCAGCCACCTTGGAAAGTACTGAGCGACTTCGCCTTCAGAGTGCATAG
ATCAGCCTGCTTTTCAGCAACTGGTCAATTTTTTCAGAAGGAGGACCGGGCTCTAATTCCTGCGCAGTGA
AGTAGCATCAATGTCTCTCAACTTCCAGATACACCTAACAGCATGGTAGCCAGTCTATTGAGGCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC206893 protein sequence
Red=Cloning site Green=Tags(s)

MGDMGDPPKKRLISLCVGCNQIHDQYILRVSPDLEWHAACLKCAECNQYLDESCTCFVRDGKTYCKRD
 YIRLYGIKCAKCSIGFSKNDFVMRARSKYVYHIECFRCVACSRQLIPGDEFALREDGLFCRADHDVVERAS
 LGAGDPLSPLHPARPLQMAAEPISARQPALRPHVHKQPEKTTRVRTVLNEKQLHLTRTCYAANPRPDALM
 KEQLVEMTGLSPRVIRVWFQNKRCCKDKRSIMMKQLQQQPNDKTNIQGMTGTPMVAASPERHDGGLQAN
 PVEVQSYQPPWKVLSDFALQSDIDQPAFQQLVNFSEGGPGSNSTGSEVASMSSQLPDTPNMVASPIEA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6041_a04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002202

ORF Size: 1047 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_002202.2](#), [NP_002193.2](#)

RefSeq Size: 2729 bp

RefSeq ORF: 1050 bp

Locus ID: 3670

UniProt ID: [P61371](#)

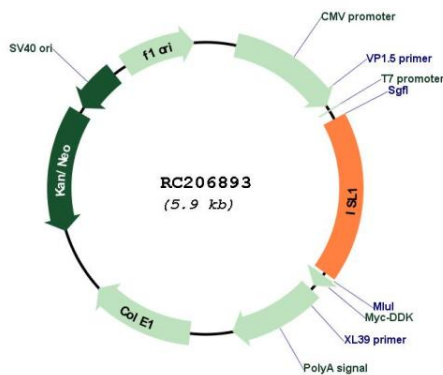
Cytogenetics: 5q11.1

Protein Families: ES Cell Differentiation/IPS, Transcription Factors

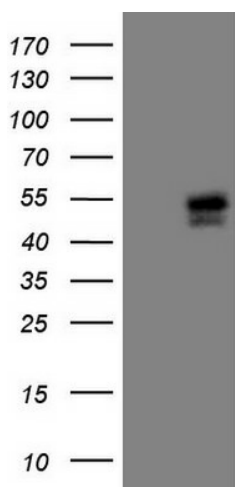
MW: 39 kDa

Gene Summary: This gene encodes a member of the LIM/homeodomain family of transcription factors. The encoded protein binds to the enhancer region of the insulin gene, among others, and may play an important role in regulating insulin gene expression. The encoded protein is central to the development of pancreatic cell lineages and may also be required for motor neuron generation. Mutations in this gene have been associated with maturity-onset diabetes of the young. [provided by RefSeq, Jul 2008]

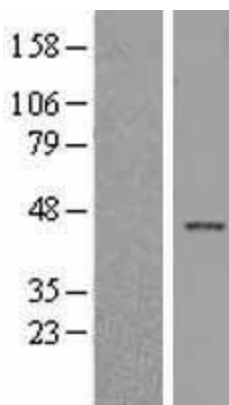
Product images:



Circular map for RC206893



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ISL1 (Cat# RC206893, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ISL1 (1:500) (Cat# [TA807585]). Positive lysates [LY400801] (100ug) and [LC400801] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400801]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206893 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).