

Product datasheet for RC204212

Islet 2 (ISL2) (NM_145805) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Islet 2 (ISL2) (NM_145805) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Islet 2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204212 representing NM_145805 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGGATATTATTTTCATTATCCTTTCTGGGTGCTATGGGTGATCATTCCAAGAAGAAGCCCGGGA
CGGCCATGTGCGTGGGCTGCGGGAGTCAGATCCACGACCAGTTTATCCTGCGGGTGTGCGCCGACCTCGA
GTGGCACGCGGCCCTGCCTCAAGTGTGCCGAGTGCAGCCAGTACCTGGACGAGACGTGCACGTGCTTCGTG
AGAGACGGGAAGACCTACTGCAAGCGGGACTACGTCAGGCTGTTCCGGCATCAAGTGCGCCAAGTGCAGG
TGGGCTTCAGCAGCAGCGACCTGGTGATGAGGGCGCGGGACAGCGTGTACCACATCGAGTGTCTCCGCTG
CTCCGTGTGCAGCCGCCAGCTGCTGCTGGGGACGAGTTCTCGCTGCGGGAGCACGAGCTGCTCTGCCGC
GCCGACCACGGCCTCCTGCTCGAGCGCGCCGCGGCCGAGCCCGCAGCCCGGCCCGCTTCCCGGCG
CCCGCGGCTGCATCTGCCGACGCTGGGTGCGGCCGGCAGCCCGGCTTGCGCCCGCACGTGCACAAGCA
GACGGAGAAGACGACCCGCGTGCAGGACTGTGCTGAACGAGAAGCAGCTGCACACTCTGCGGACCTGCTAC
GCCGCCAACC CGCGCCGACGCTCTCATGAAGGAGCAGCTGGTGGAGATGACCGGCTGAGCCCGCGG
TCATCCGCTCTGGTCCAGAACAAGCGCTGCAAGGACAAGAAGAAATCCATTCTCATGAAGCAGCTGCA
GCAGCAGCAGCACAGCGACAAGCAGCCTTCAGGGACTGACTGGGACGCCCTGGTGGCGGCGAGTCCC
ATCCGCCATGAGAACGCCGTGCAGGGCAGCGCAGTGGAGGTGCAGACGTACCAGCCGCCGTGGAAGGCGC
TCAGCGAGTTTGCCCTCCAGAGCGACCTGGACCAACCGCCTTCCAACAGCTGGTCTCCTTCCGAGTC
CGGCTCCCTAGGCAACTCCTCCGGCAGCGACGTGACCTCCTGTCTCGAGCTCCCGGACACCCCAAC
AGTATGGTGCCGAGTCCCGTGGAGACG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC204212 representing NM_145805
Red=Cloning site Green=Tags(s)

MVDIIFHYPFLGAMGDHSKKKPGTAMCVGCGSQIHDQFILRVSPDLEWHAACLKCAECSQYLDCTCFV
 RDGKTYCKRDYVRLFGIKCAKCQVGFSSSDLVMRARDSVYHIECFRCSVCSRQLLPGDEFSLREHELLCR
 ADHGLLLERAAAAGSPRSPGPLPGARGLHLPDAGSGRQPALRPHVHKQTEKTRVRTVLNEKQLHLRACY
 AANPRPDALMKEQLVEMTGLSPRVIRVWFQNKRCCKDKKSILMKQLQQQHSDKTSLQGLTGTPLVAGSP
 IRHENAVQGSVAEVQTYQPPWKALSEFALQSDLQPAFQQLVSFSESGSLGNSSGSDVTSLSSQLPDTN
 SMVPSPVET

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3469_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_145805

ORF Size: 1077 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_145805.1](#), [NP_665804.1](#)

RefSeq Size: 1836 bp

RefSeq ORF: 1080 bp

Locus ID: 64843

UniProt ID: [Q96A47](#)

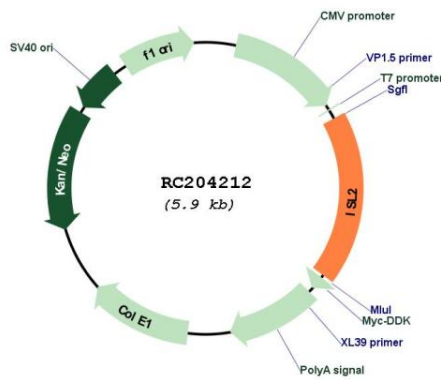
Cytogenetics: 15q24.3

Protein Families: Transcription Factors

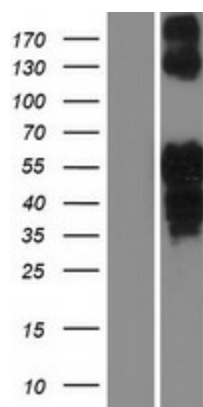
MW: 39.6 kDa

Gene Summary: Transcriptional factor that defines subclasses of motoneurons that segregate into columns in the spinal cord and select distinct axon pathways.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC204212



Western blot validation of overexpression lysate (Cat# [LY407857]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204212 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).