

Product datasheet for **RC225832**

DUX4L2 (NM_001127386) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	DUX4L2
Synonyms:	DUX4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >RC225832 ORF sequence, **codon optimized**.
Due to the complexity of NM_001127386, the ORF clone is codon optimized for mammalian Expression.
The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGAAGGGATGGTCCCTGCCAGCCTGCGGACCCCTCCAGGGCGGGCTCGCCGGATGGCTCGTGTCCGAG
CAGGGCTGCTGGCGGCCCTGCCGCTGTCCACTCTCCAGCCGAGGTTACCGGCAGCCCCCAGCAAGCCT
GTGCCCAAGACCTAGTGTGAAGTTCGCCCTGGTCTGACAGCAATGGCCCTGCCACCCCTCCGATTCA
ACTCTCCCTGCTGAGGCTCGCGACGGGGCCGCGAAGAAGGCTTGTGTGGACACCGTCTCAAAGCGAGG
CTCTGCGGGCTGCTTCAACGCAACCCATACCCCGGTATCGCAACTCGCGAAAGACTCGCTCAGGCCAT
AGGCATCCCGGAGCCAGAGTGCAGATCTGGTTCCAGAATGAAAGGAGTAGGCAGCTGCGGCAGCACAGG
AGGGAGTCTCGGCCCTGGCCGGGTGCGCGGGGGCCCCCGAGGGAAGGAGAAACGGACAGCCGTGACTG
GTAGCCAGACAGCTTTGTTGTTGAGGGCTTTGAGAAGGACAGGTTTCCCGGTATCGCCGCGCGGAGGA
GCTCGCAAGAGAAACCGGACTCCCGGAGAGTAGAATACAGATTTGGTTCCAGAACAGACAGCACGGCAC
CCTGGACAGGGCGGGCGCGCACCAGCTCAAGCTGGCGGCTGTGTTCTGCCGCCCCAGGAGGCGGCCACC
CGGCTCCCAGCTGGGTGCTTTTCGCTCACACTGGCGCTGGGGGACGGGGCTCCCGGCACCACAGTGCC
TTGCGCCCCGAGCTCTCCCTCAAGGGGCATTTGTGAGCCAAGCTGCCGAGCGGCCCCCGCACTGCAG
CCCTCCCAAGCAGCTCCTGCCGAAGGGGTGAGTCAGCCCGCACCCGCCAGGGGAGACTTCGCCTATGCAG
CTCCGGCCCCCTGATGGAGCCCTCAGTCATCCCCAGGCACCTCGCTGGCCTCCACACCCCTGGGAAATC
ACGGGAAGACCGCGACCCACAACGAGACGGTCTGCCGGTCCATGTGCCGTGGCTCAGCCCGGACCAGCA
CAGGCCGGCCCTCAAGGACAGGGGTGCTCGCCCCACCTACCTCCAGGGATCTCCCTGGTGGGGCTGGG
GCAGGGGCCCACAGGTTGCCGGTGTGCTGGTGGAGCCCCAGGCCGGGGCTGCGCCACCCCCACAGCCCGC
CCCCCAGACGCTTCTGCATCCGCTCGCCAAGGCCAAATGCAGGGTATCCCGGCCCATCTCAGGCTCTG
CAGGAGCCGGCTCCCTGGTCAGCCTTGCCCTGTGGATTGCTGCTCGACGAGCTGCTTGTCTCCAGAGT
TCCTCCAGCAGGCGCAGCCACTGCTCGAGACGGAAGCTCCCGGGGAGCTGGAAGCGTCCGAAGAGCCCG
AAGCCTGGAGGCCCTGAGCGAAGAAGATATCGCGCACTGTTGGAGGAAGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

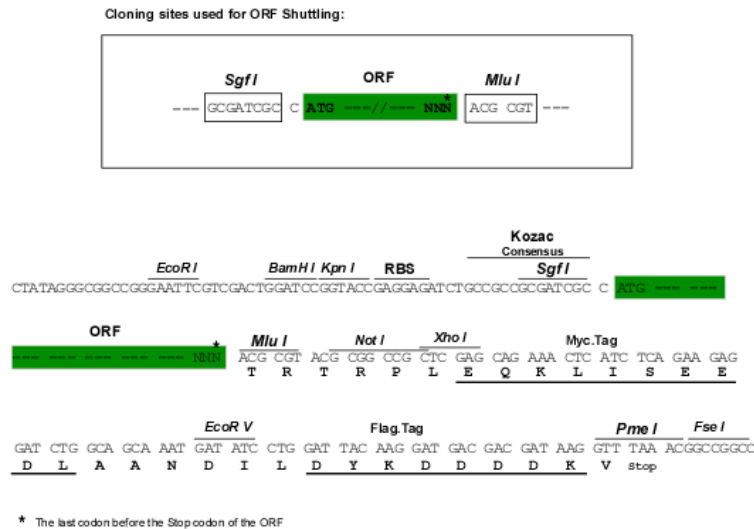
Protein Sequence: >RC225832 representing NM_001127386
Red=Cloning site Green=Tags(s)

MKGWSLPACGPLQGRLAGWLAVRAGLLAAPAAVHSPAIEVHGSPASLCPRPSVKFRPGLTAMALPTPSDS
TLPAEARGRRRRRLVWTPSQSEALRACFERNPYPGIATRERLAQAIGIPEPRVQIWFQNSRQLRQHR
RESRPWPGRRGPPERRKRTAVTGSQTALLLRAFEKDRFPGIAAREELARETGLPESRIQIWFQNRARRH
PGQGGRAPAQAGGLCSAAPGGGHPAPSWVFAHTGAWGTGLPAPHVPCAPGALPQGAFFVSQAARAAPALQ
PSQAAPAEVVSQPAPARGDFAYAAPPDGLSHPQAPRWPPHPGKSREDRDPQRDGLPGCAVAQPGPA
QAGPQGQVLAPPTSQGSPPWWGWRGPQVAGAAWEPQAGAAPPQPAPPDASASARQGMQIPAPSQAL
QEPAPWSALPCGLLLDELLASPEFLQQAQPLLETEAPGELEAEEAASLEAPLSEEEYRALLEEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001127386

ORF Size: 1455 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

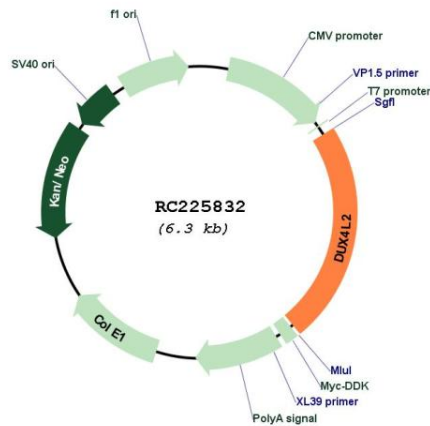
RefSeq: [NM_001127386.1](#), [NP_001120858.2](#)

RefSeq Size: 1380 bp

RefSeq ORF: 1275 bp
Locus ID: 728410
Cytogenetics: 4q35.2
MW: 51.1 kDa

Gene Summary: This gene is located within a D4Z4 repeat array in the subtelomeric region of chromosome 4q. The D4Z4 repeat is polymorphic in length and a similar D4Z4 repeat array has been identified on chromosome 10. Each D4Z4 repeat unit has an open reading frame (named DUX4) that encodes two homeoboxes; the repeat-array and ORF is conserved in other mammals. There is no evidence for transcription of the gene at this locus though RT-PCR and in vitro expression experiments indicate that a telomeric paralog of this gene is transcribed in some haplotypes. Contraction of the macrosatellite repeat causes autosomal dominant facioscapulohumeral muscular dystrophy (FSHD). [provided by RefSeq, Jun 2014]

Product images:



Circular map for RC225832