

Product datasheet for **RG206174**

RFXDC1 (RFX6) (NM_173560) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RFXDC1 (RFX6) (NM_173560) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RFX6
Synonyms:	dj955L16.1; MTCHRS; MTFS; RFXDC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG206174 representing NM_173560
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCAAGTCCCGAAGCTGGAAGACACCTTCTGCAGGCGCAGCTGCGCCCCAACTGTCCCGGGGA
 TCCAGGAAGACTGCTGTGTGCAGCTCCTGGCAAGGGCTTGCTAGTCTATCCGGAAGAAACAGTGTACCT
 GGCGGCCGAAGGGCAGCCCGGGGCGAGCAGGGCGGGGAGAAAGGCGAAGACCCGGACTGCCGGGG
 GCAGTGAATCAGAAATGCACCTAAACAATGGTAACTTTCTCTGAAGAAGAGGACGCCGACAACCACG
 ACAGCAAACCAAGCAGCGGATCAATACCTGTCTCAGAAGAAAACCATCACGCAGATTGTGAAGGATAA
 AAAGAAGCAGACACAGCTCACGCTGCAGTGGCTTGAAGAGAATTACATTGTATGTGAAGGAGTTTGCTTA
 CCACGGTGCATTCTTTATGCACACTACTAGATTTCTGTAGGAAAGAGAAATTAGAGCCAGCCTGTGCGG
 CCACCTTTGGAAGACAATTCGCCAGAAGTTCCCTCCTAACACAAGGCGGCTTGAACAAGAGGCCA
 TTCAAAGTATCATTACTATGGGATTGGCATCAAAGAGAGCAGTGCATATTACCACTCCGTTTATTCTGGA
 AAGGGCTTGACAAGGTTTTCTGGAAGCAAGCTAAAGAATGAGGGTGGCTTCACTCGTAAATATTCGCTTA
 GCTCAAAAACCTGGAACACTTCTCCAGAATTTCCAGCGCTCAACACCTTGATACCAAGGATGCATTTT
 TAAGGACAAGGTTGATACGCTCATAATGATGTACAAAACCTCACTGCCAGTGTATCCTGGACAATGCAATT
 AATGGAACCTTTGAAGAGATCCAGCATTTTTTATTACACTTTTGGCAAGGAATGCCTGACCATCTCCTTC
 CCCTGCTCGAAAATCCTGTTATCATTGATATTTCTGTGTTTGTGACTCAATTCTTTATAAGGTTCTTAC
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 AAAAATGGGAACAGTGGGTTGTTTCATCCTTGGAAAACCTGCCAGAAGCTCTAACTGACAAGAAAATAC
 CTATTTGTGCGAAGATTTGTATCTTCTGAAACGACAAAACATCTTCTTACATCTTGCCAGATTTGCCAG
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 ATTGCTCTCAAGCCCTTCTTACCATTTTCAAGCAGCACAGACTGAATCTGGTATCTCACTGAACATG
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 ATGTTGGATACTGTGGTGAACAGAGATTATTAAGACCAGCAAACAAAATGGAAGGTCATTAAGAAG
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 ATGCATCCAGTTTTGTTCTTTTCAATTTGATTGCAATGCTTCTCGATGAATACATTCTCTGGCCATGGA
 GACCCAGTTTAAATGACAAAGAGCAGGAGTTACAGAATTTATTGGACAAGTATATGAAGAATTCAGAT
 GCGAGTAAAGCTGCTTTCACTGCTTCTCCGAGTTCATGCTTTCTGGCCAACCGTAATAAAGGGAGCATGG
 TTTCCAGCGACGCTGTGAAGAATGAAAGCCACGTGGAGACAACCTATCTCCCTCTGCCATCCAGTCAACC
 TGGAGGCTAGGCCCTGCTCTGCACCAGTTCCTGCTGGGAACACAGACAACATGCCGCTCACAGGTCAA
 ATGGAGCTTTACAGATTGCTGGTCACTGATGACACCACCCATTTCTCCAGCCATGGCAAGCCGAGGAA
 GTGTCAATTAACCAAGGACCAATGGCAGGGAGGCCCCCAAGTGTGGGCCAGTACTGTGAGCTCCATCACA
 CTGCTCCACATACCCAGAGCCATTTATCCCGCTCTCCCTCAAGCCAATCATGACTTTTATAGCACCAGC
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 TTTTAAATACAGGAAGCTTCAATTTCTTGAACACACAGGAGCTGCCAGCTGCCAAGGACAACACTGC
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 CTTAACATTTTAGATGACAGTGGTAGAAAACAGACCAGCTCGTTTTACACAGACACATCATCTCCAGTTG
 CATGTCGAACTCCAGTCTAGCTTCCAGTTTGCAAAACCCAACTCTTCTCTCATCCCAATGTATGTA
 TGGAACTTCCAACAGTATCCAGCTCAAGAAACCTGGACTCCCATGGAACAAGCAGTAGAGAAATGGTG
 TCCTCTTACCACCTATCAACACTGTGTTTCATGGGAACAGCAGCTGGAGGCACT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG206174 representing NM_173560
 Red=Cloning site Green=Tags(s)

MAKVPKLEDTFLQAQPAPQLSPGIQEDCCVQLLGKGLLVYPEETVYLAEGQPGGEQGGGEKGEDPELPG
 AVKSEMHLNNGNFSSEEDADNHSKTKAADQYLSQKKTITQIVKDKKKQTQLTLQWLEENYIVCEGVCL
 PRCILYAHYLDFCRKEKLEPACAATFGKTIKQKFPLLTTRRLGTRGHSKYHYGGIGIKESSAYHSVYSG
 KGLTRFSGSKLKNEGGFTRKYSLSKKTGTLLEPFPSAQHLVYQGCISKDKVDLIMMYKTHCQCILDNAI
 NGNFEEIQHFLHFQWQMPDHLPLLENPVIIDIFCVCDSTLYKVLTDVLIIPATMQEMPESLLADIRNFA
 KNWEQWVVSLENLPEALTDKKIPVRRFVSSLKRQTSFLHLAQIARPALFDQHVNSMVSIDIERVNLNS
 IGSQALLTISGSTDESIGIYTHEDSITVFQELKDLLKKNATVEAFIEWLDTVVEQVRVSKQNGRSLKK
 RAQDFLLKWSFFGARVMHNLTLNASSFGSFLIRMLLDEYILLAMETQFNNDKEQELQNLLDKYMKNSD
 ASKAAFTASPSSCFLANRNKGSMSVSSDAVKNEHVETTYLPLSSQPGGLPALHQFPAGNTDNMPLTGQ
 MELSQIAGHLMTPPISPAMASRGSVINQGMAGRPPSVGPVLSAPSHCSTYPEPIYPALPQANHDFYSTS
 SNYQTVFRAQPHSTGLYPHHEHGRCAWTEQQLSRDFSGSCAGSPYNSRPPSSYGPSLQAQDSHMNQ
 FLNTGSFNFLSNTGAASCQGATLPPNSPNGGYGSNINYPESHRLGSMVNQHVSIVSSIRSLPPYSIDIHP
 LNILDDSGRKQTSSTFYDTSSPVACRTPVLASSLQTPIPSSSSQCMYGTSNQYPAQETLDSHGTSREMY
 SSLPPINTVFMGTAAGGT

TRTRPLE - GFP Tag - V

Restriction Sites:

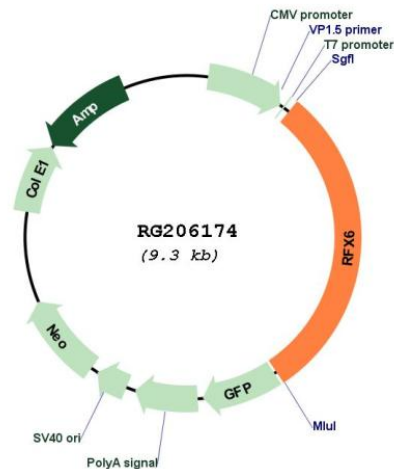
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_173560

ORF Size: 2784 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_173560.1](#), [NP_775831.1](#)

RefSeq Size: 3538 bp

RefSeq ORF: 2787 bp

Locus ID: 222546

UniProt ID: [Q8HWS3](#)

Cytogenetics: 6q22.1

Protein Families: Transcription Factors

Gene Summary: The nuclear protein encoded by this gene is a member of the regulatory factor X (RFX) family of transcription factors. Studies in mice suggest that this gene is specifically required for the differentiation of islet cells for the production of insulin, but not for the differentiation of pancreatic polypeptide-producing cells. It regulates the transcription factors involved in beta-cell maturation and function, thus, restricting the expression of the beta-cell differentiation and specification genes. Mutations in this gene are associated with Mitchell-Riley syndrome, which is characterized by neonatal diabetes with pancreatic hypoplasia, duodenal and jejunal atresia, and gall bladder agenesis.[provided by RefSeq, Sep 2010]