

## Product datasheet for **MR221684**

### Celf2 (NM\_001110229) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Celf2 (NM_001110229) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Celf2
Synonyms:	B230218O03; B230345P09Rik; C88023; CELF-2; CUG-BP2; Cugbp2; D230046B21Rik; Etr-3; mETR-3; Napor
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>MR221684 representing NM\_001110229  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGTTTCCCTAATCTCTGACCTGGACTCCCTGAGAGGCTGGAAAGCGTTAAGAGAGACTGCCACAGAGT  
 TATCTGGAAGTCCACCAAGTAACGGCACAGCCAACAAGATGAACGGAGCTTTGGATCATTAGACCAGCC  
 AGACCCAGATGCCATTAAGATGTTTGTGCGACAGATCCCTAGGTCCTGGTCGAAAAGGAGCTGAAAAGAA  
 CTTTTTGAAGCTTATGGAGCTGTCTACCAGATCAACGCTCTCCGGGACCGGAGTCAGAACCTCCCCAGA  
 GTAAAGGTTGTTGTTTCGTAACATTTTATAACAAGAAAAGCTGCACTTGAGGCCAGAAATGCACTGCACAA  
 TATTAACCTTTACCTGGGATGCATCATCCATTAGATGAAACCTGCAGATAGTAAAAGTCAAACGCT  
 GTGGAAGACAGAAAATTGTTTCATAGGAATGGTTTCCAAGAAATGTAAACGAGAATGATATCAGAGTGTGT  
 TTTCTCCATTGCGTCAGATAGAAGAATGCCGATTCTCCGGGACCTGATGGGCTGAGTCGAGGCTGTGC  
 GTTTGTACATTTTCTACAAGGGCAATGGCACAGAATGCAATCAAAGCCATGCATCAGTCTCAGACCATG  
 GAGGGCTGCTCTTACCAATCGTGGTGAAGTTTGTGCTGACTCAGAAGGACAAAGAGCAAAGGCCCTCC  
 AGCAGCAGCTTGACAGCAGATGCAACAGCTCAACACTGCCACTTGGGGGAACTAACAGGACTGGTGG  
 ACTTACCCCGCAGTACCTGGCGTTCTGCAGCAGGCCACCTCCTCCAGCAACTGGGTGCATTAGTGGC  
 ATTCAGCAAAATGGCTGGCATGAATGCTTACAGTTACAGAATCTGGCAACTGGCTGCTGCTGCAGCTG  
 CTGCTCAAACCTCAGCCACCAGCACTGCAACCCCTCTGTCTAGCACAAGCAGTGCCTTGGGAGCCCT  
 CACAAGCCCTGTGGTGTCTCAACCCCAATCCACCGCTGGTGGCCATGAATTCCTTGACCTCTCTT  
 GGGACTCTACAAGGATTGGCTGGAGCCACTGTCGGATTGAATAATTAATGCACTAGCAGGTACCATAA  
 ACAGTATGGCGGCTCTGAATGGAGGACTTGGCGCCACAGGCTTGACGAATGGTACGGCTGGCACCATGGA  
 CGCCCTGACCCAGGCTACTCAGGAATCAGCAGTATGCGGCAGCTGCACTGCCCACTTTGTACAGCCAG  
 AGCTTGTGCAACAGCAGAGTGTGTCAGGCAGCCAGAAGGAAGTCCAGAGGGGGCAAACCTCTTTATTT  
 ACCACCTTCCACAGGAGTTGGAGACCAGGACATTCTGCAGATGTTTCATGCCCTTTGAAATGTTATCTC  
 TGCTAAAGTCTTATTGACAAACAGACCAATCTGAGCAAGTGTCTTGGTTTTGTTAGCTATGACAAATCCA  
 GTCTCTGCACAAGCTGCAATCCAGGCTATGAACGGCTTTCAGATCGGCATGAAACGCTTGAAGGTGCAGC  
 TGAACGCTCCAAAACGACAGCAAACCTTAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR221684 representing NM\_001110229  
 Red=Cloning site Green=Tags(s)

MVSLISDLDSLKGWALRETATEL SGSPPSNGTANKMNGALDHSDQDPDAIKMFVQIPRSWSEKELKE  
 LFEPYGAVYQINVLDRSQNPPQSKGCFVTFYTRKAALAEQNALHNIKTLPGMHHPQIMKPADSEKSN  
 VEDRKLFIGMVSKKNENDIRVMFSPFGQIEECRILRGPDL SRGCAFVTFSTRAMAQNAIKAMHQSQTM  
 EGCSSPIVVKFADTQKDKQRRLLQQLAQMQQLNATWGNLTGLGGLTPQYLALLQQTSSSNLGAFTSG  
 IQQMAGMNALQLQNLATLAAAAAAQTSATSTNANPLSSTSSALGALTSPVAASTPNSTAGAAMNSLTS  
 GTLQGLAGATVGLNNINALAGTINSMAALNGLGATGLTNGTAGTMDAL TQAYSQIQQYAAAAALPTLYSQ  
 SLLQQQSAAGSQKEGPEGANLF IYHLPQEFQDQDILQMFMPFGNVI SAKVFIKQTNLSKCFGFVSYDNP  
 VSAQAAIQAMNGFQIGMKRLKVQLKRSKNDKSKPY

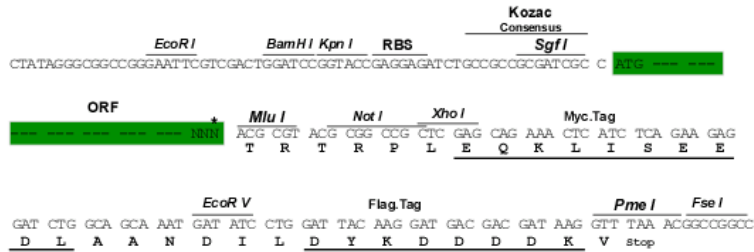
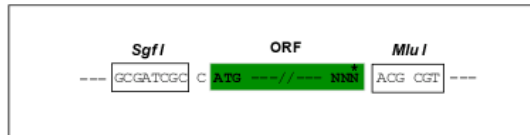
**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

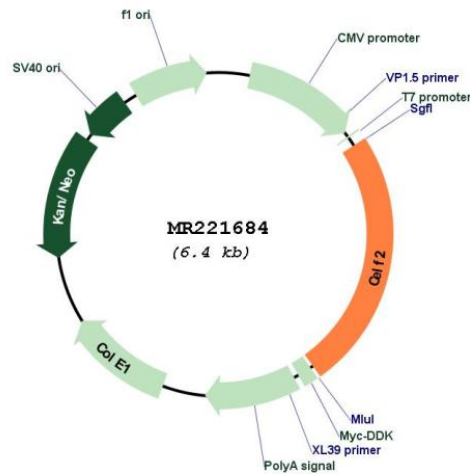
Cloning Scheme:

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



<b>ACCN:</b>	NM_001110229
<b>ORF Size:</b>	1572 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001110229.1</a> , <a href="#">NP_001103699.1</a>
<b>RefSeq Size:</b>	7761 bp
<b>RefSeq ORF:</b>	1575 bp
<b>Locus ID:</b>	14007
<b>UniProt ID:</b>	<a href="#">Q9Z0H4</a>
<b>Cytogenetics:</b>	2 A1
<b>MW:</b>	56.3 kDa

**Gene Summary:**

RNA-binding protein implicated in the regulation of several post-transcriptional events. Involved in pre-mRNA alternative splicing, mRNA translation and stability. Mediates exon inclusion and/or exclusion in pre-mRNA that are subject to tissue-specific and developmentally regulated alternative splicing (By similarity). Specifically activates exon 5 inclusion of TNNT2 in embryonic, but not adult, skeletal muscle (By similarity). Activates TNNT2 exon 5 inclusion by antagonizing the repressive effect of PTB (By similarity). Acts as both an activator and repressor of a pair of coregulated exons: promotes inclusion of the smooth muscle (SM) exon but exclusion of the non-muscle (NM) exon in actinin pre-mRNAs (By similarity). Promotes inclusion of exon 21 and exclusion of exon 5 of the NMDA receptor R1 pre-mRNA (By similarity). Involved in the apoB RNA editing activity (By similarity). Increases COX2 mRNA stability and inhibits COX2 mRNA translation in epithelial cells after radiation injury. Modulates the cellular apoptosis program by regulating COX2-mediated prostaglandin E2 (PGE2) expression. Binds to (CUG)<sub>n</sub> triplet repeats in the 3' UTR of transcripts such as DMPK (By similarity). Binds to the muscle-specific splicing enhancer (MSE) intronic sites flanking the TNNT2 alternative exon 5 (By similarity). Binds preferentially to UG-rich sequences, in particular UG repeat and UGUU motifs (By similarity). Binds to apoB mRNA, specifically to AU-rich sequences located immediately upstream of the edited cytidine (By similarity). Binds AU-rich sequences in the 3' UTR of COX2 mRNA. Binds to an intronic RNA element responsible for the silencing of exon 21 splicing. Binds to (CUG)<sub>n</sub> repeats. May be a specific regulator of miRNA biogenesis. Binds to primary microRNA pri-MIR140 and, with CELF1, negatively regulates the processing to mature miRNA (By similarity).[UniProtKB/Swiss-Prot Function]