

Product datasheet for **RG214443**

KY (NM_178554) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	KY
Synonyms:	MFM7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence: >RG214443 representing NM_178554
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAGCTGAAGAAGGACATCAACGCTGTATCTATCGACATGCTGCTGATCGTGCACCTCGGAGAAGCGGC
 GCGCCGCACAGGTACGCTCTCAGACCAGCAGGCGAACCAGCTCGCTGCTGCAGCGGAGGAGGATT
 CCAAGGTGTTGAAATGGAGTCCGAAGATGGCAGAAATTAGAAGGAAATGACTTTCACGAAAACCTTGGTG
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 CTCTGTGAGGTGTCTTCTGCAACCGGAATGTCCATTCAAATTGAAGCTGCATGTTATGCCAAAGT
 CCTGGTGAAGGGGAGGACACATGGCCCTGACCCTGAACACGAGGGCTACTGGGAGGGAAGTGCAGC
 ACAGCTGGCTGCCAGGAAGTCTATGTCATGGTGTGAGAATGCCAACCAATTTCTACTCTACATCC
 TGAATACAAAGTGAATGCCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

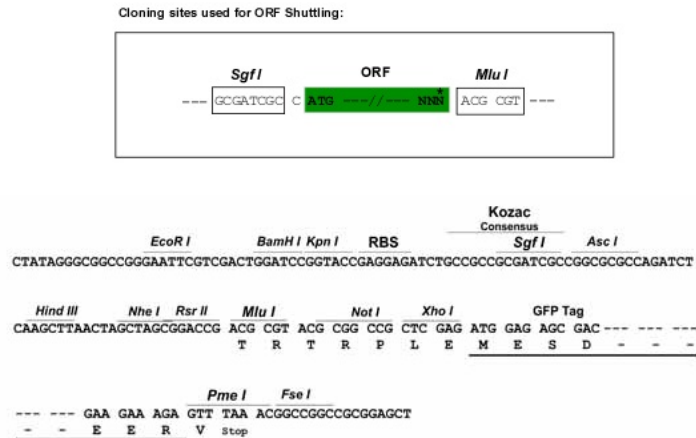
Protein Sequence: >RG214443 representing NM_178554
 Red=Cloning site Green=Tags(s)

MELKKDINAVSIDMLLIVHSEKRRAAQGTLSQQANPSSLLQRGGGFQGVNGVRRWQKLEGNDFHENLV
 EKQHPQPQVITSYNSQGTQLTVEVHPRDAMPQLKKFSLAKRLQGDKNRTRPRQPGGKDAHAYPWDRS
 SLKSMSLDLQFEKLDIYASQVTAKSGLDELVSDLLQEAHTDLERVRAIWIWICHHIEYDIAAAQEKDRQ
 AFKPTDILRTQKTNCDGYAGLFERMCRLAGVQCMTPVGYSGFGYQTGQSFSGEFDHAWNAYYLEGRWHL
 VDSTWGSGLVDTITSKFTFLYNEFYFLTHPALFIEDHFPDNKNWQLLKPPQSLRQFENNMVYHSEFYNGK
 MLSAHPETSMIRTVNGKATVTIESCAPTLFMFLNGKQEHGLLSLRKNGMKLEVYPPTMGTHKLQIFAKG
 NSDIYSSVLEYTLKCNVYDMGVQLPAELHQPVGPSWFSEQMGIMKPSHPDPIIHTSDGRCSISFSVEEGI
 NVLASLHGGDGPITEETQRRYIFQLHREKQTELKVQLPHAGKFALKIFVKKRQEPGNYIFVFNLYVCCAN
 TKVNWPMFPESFGNWGDNELLEPLSGVLPANRNVPFKLKLHGIKVLVKGQDTWPLTLNHEGYWEGSCS
 TAGCQEVYVMLENANHNFYSYILKYKVNAQ

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_178554

ORF Size: 1983 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_178554.6](#)

RefSeq Size: 5718 bp

RefSeq ORF: 1986 bp

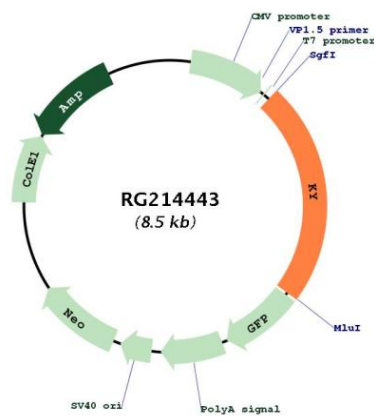
Locus ID: 339855

UniProt ID: [Q8NBH2](#)

Cytogenetics: 3q22.2

Gene Summary: The protein encoded by this gene belongs to the transglutaminase-like superfamily. The protein is involved in the function, maturation and stabilization of the neuromuscular junction and may be required for normal muscle growth. Mutations in this gene are associated with myopathy, myofibrillar, 7. [provided by RefSeq, Apr 2017]

Product images:



Circular map for RG214443