

Product datasheet for **MG205119**

Qk (BC053426) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Qk
Synonyms:	Qkl, 1500005P18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >MG205119 representing BC053426
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGTCGGGGAATGGAACGAAGGAGAAGCCGAAGCCACCCAGATTATTTGATGCAGCTGATGAACG
ACAAGAAGCTCATGAGCAGCCTGCCAACTTCTGCGGGATCTTCAACCACCTCGAGCGGCTGCTGGACGA
AGAAATTAGCAGAGTACGGAAGACATGTACAATGACACGTTAAATGGCAGTACAGAGAAAAGAAGTGCA
GAATTGCCTGACGCGGTGGGACCCATTGTTCAAGTACAAGAGAACTTTATGTGCTGTAAAAGAATACC
CTGATTTTAAATTTGTTGGGAGAATCCTTGGACCTAGAGGACTTACAGCTAAACAACCTGAAGCAGAAAC
GGGATGTAATAATGGTCCGAGGCAAGGCTCAATGAGGGATAAAAAGAAGGAGGAGCAAAATAGAGGC
AAGCCCAATTGGGAGCATCTAAATGAAGACTTACATGTAATCACTGTGAAGATGCTCAGAACAGAG
CAGAAATCAAGCTGAAGAGAGCGGTTGAAGAAGTGAAGAAGTTACTGGTACCTGCGGCTGAAGGTGAAGA
CAGCCTGAAGAAGATGCAGCTGATGGAGCTTGCAATTCTGAATGGCACCTACAGAGACGCCAACATTAAA
TCACCAGCCCTTGCCCTTTCTCTTGACGCAACTGCCAGGCTGCTCCAAGGATCATCACTGGGCCTGCGC
CTGTCTCCACACAGCTGCTCTGCGTACACCTACGCCAGCTGGCCCTACCATAATGCCTTTGATCAGACA
AATACAGACCGCTGTCATGCCAAACGGAACCTCACCCTGCTGCAATAGTCCCTCCAGGCCTGAA
GCTGGGTTAATCTACACCCCTATGAATACCCCTACACATTGGCACCAGCTACATCAATCCTTGAGTACC
CTATTGAACCCAGTGGTGTGTAGGTGCGGTGGCTACTAAAGTTCAAGGCACGATATGCGTGTCCATCC
TTACCAAGGATTGTGACCGCAGACCGAGCCGCCACCGCAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence:

>MG205119 representing BC053426

Red=Cloning site Green=Tags(s)

MVGEMETKEKPKPTPDYLMQLMNDKKLMSSLPNFCGIFNHLERLLDEEISVRKDMYNDTLNGSTEKRSA
ELPDAVGPIVQLQEKL YVPVKEYPDFNFVGRILGPRGLTAKQLEAETGCKIMVRGKGSMDKKKEEQNRG
KPNWEHLNEDLHVLITVEDAQNRAEIKLKRAVEEVKKLLVPAAEGEDSLKMKLMELAILNGTYRDANIK
SPALAFSLAATAQAAPRIITGPAPVLPPAALRTPTPAGPTIMPLIRQIQTAVMPNGTPHPTAAIVPPGPE
AGLIYTPYEYPYTLAPATSILEYPIEPSGVLGAVATKVRHDMRVHPYQRIVTADRAATGN

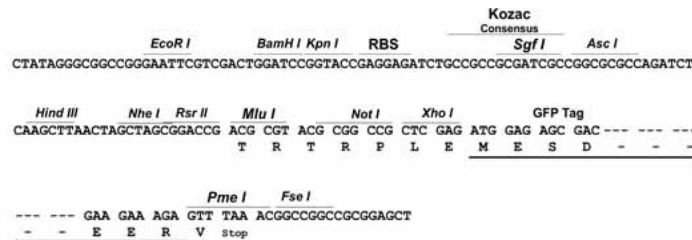
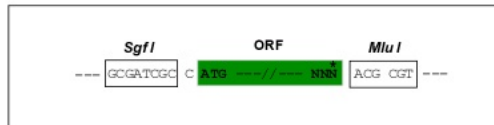
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN:

BC053426

ORF Size:

1023 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:

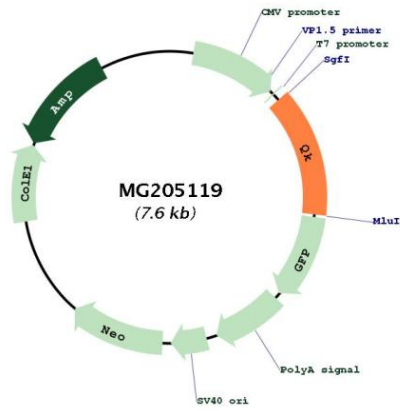
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	BC053426.1
RefSeq Size:	2208 bp
RefSeq ORF:	1025 bp
Locus ID:	19317
Cytogenetics:	17 7.75 cM
Gene Summary:	RNA-binding protein that plays a central role in myelinization (PubMed:10864952, PubMed:11917126). Also required for visceral endoderm function and blood vessel development (PubMed:11892011, PubMed:16470614). Binds to the 5'-NACUAAAY-N(1,20)-UAAAY-3' RNA core sequence (PubMed:16041388). Acts by regulating pre-mRNA splicing, mRNA export, mRNA stability and protein translation, as well as cellular processes including apoptosis, cell cycle, glial cell fate and development (PubMed:10535969, PubMed:12467586, PubMed:11297509, PubMed:11917126, PubMed:15568022). Required to protect and promote stability of mRNAs such as MBP and CDKN1B which promotes oligodendrocyte differentiation (PubMed:10535969, PubMed:15568022). Participates in mRNA transport by regulating the nuclear export of MBP mRNA (PubMed:12467586). May also play a role in smooth muscle development (PubMed:14706070).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG205119