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Product datasheet for MG207355

Fktn (NM_139309) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fktn (NM_139309) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Fktn
Synonyms:	D830030O17Rik; Fcmd
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG207355 representing NM_139309
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGTAGAATCAATAAGAACGTGGTCTTGGCCCTTTTAACATTGACGAGTTCTGCCTTTCTGCTGTTTC
AGCTGTACTACTACAAGCACTATTTGTCTGCAAGGAATGGACTGGGTTCATCAAAATCCAAAGGGAATCG
AGTTGGATTTGATAGCACACAGTGGCGTGCAGTTAAGAAATTTATTATGCTGACATCCAGCCAAAATGTG
CCAGTGTTCCTTATTGACCCATGGATTCTGGAATCAATTAATAAAAACTTCGAACAAGTGAAAAATGCTT
CTCAAGGCCCGGCTTCAGAATGCAGATTTTTCTGTGTTCCGAGAGACTTCACTGCGTTCGCACTGCAGTA
TCACCTGTGGAAGAATGAGGATGGCTGGTTTCGGATAGCTGAGAATATGGGGTTTCAATGCCTAAAGACT
GAAAGCAAGGATCCTCGGCTAGATGGAATAGACTCACTTTCTGGGACTGAAATCCCTCTGCACTACGTCT
GTAAGCTGACCACTCATGCCATCCACTTGGTAGTCTTTCATGAGAGGAGTGGCAACTACCTCTGGCATGG
TCACCTACGACTCAAAGGACACATGGATAGGAAGTTTGTTCCTTTTCGAAAGTTACAGTTTGGTCGTTAT
CCTGGAGCCTTTGACAGGCCAGAGTTACAGCAAGTTACTGTTGATGGACTAGATATGCTTATTCCGAAAG
ACCCAGGGCGCTTTCTAGAAGAAGTACCTCACTCCAGATTTATCGAGTGCAGGTATAAGGAAGCTCGGGC
GTTCCTCCAGCAGTACATTGATGATAATACTGTGGATGCTATGGTCTTTCGAAAGAGGGCAAAGGAGTTA
CTGCAACTAGCAGCCAAGACGCTGAAGGACCTGGGAGTGCCCTTCTGGCTGAGCAGTGGGACTTGTCTAG
GATGGTATCGGCAGTGCGGTATTATTCCTTACAGCAAAGATGTCGACTTAGGGATTTTTATACAAGATTA
CAAACCTGATATTATTTTGGCATTTCAGGAAGCAGGACTTCCACTCAAACACAAGTTTGGGAAGGTGGAA
GACAGCTTGGAACTATCCTTCCAGGGGAAAAATGATGTAAAACTTGATATTTTTTTCTTCTATGAAGAGG
CTGACCATCTGTGGAATGGAGGCACGCAGGCCAGAACGGGAAAAAAGTTTAAGTATCTGTTTCCCAAGTT
TACACTGTGCTGGACTGAGTTTGTAGACATCAAAGTGCATGTTCCCTGTGAAACGGTTGACTACATTGAA
GCCAACTATGGTAAGACCTGGAAGATTCCTATCAAGACATGGGACTGGAAGAGCTCACCCCCGAATGTGC
AGCCCAATGGCATCTGGCCTATTTCGGAGTGGGATGAGGTTATCCAGTTGTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

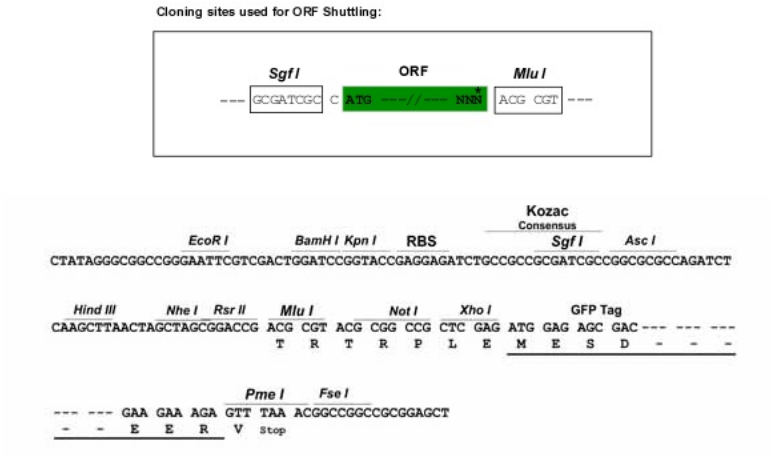
>MG207355 representing NM_139309
Red=Cloning site Green=Tags(s)

MSRINKNVVLALLTLTSSAFLLFQLYYYKHYLSARNGLGSSKSKGNRVGFDSTQWRAVKKFIMLTSSQNV
PVFLIDPWILESINKNFEQVKNASQGPASECRFFCVPRDFTAFALQYHLWKNEDGWFRIAENMGFQCLKT
ESKDPRLDGIDSLSGTEIPLHYVCKLTTHAIHLVVFHERSGNYLWHGHLRLKGHMDRKFVPFRKLQFGRY
PGAFDRPELQQVTVDGLDMLIPKDPGRFLEEVPHSRFIECRYKEARAFLQQYIDDNTVDAMVFRKRAKEL
LQLAAKTLKDLGVPFWLSSGTCLGWYRQCGIIPYSKDVDLGIFIQDYKPDIILAFQEAGLPLKHKFGKVE
DSLELSFQGKNDVKLDIFFFYEEADHLWNGGTQARTGKKFKYLFPKFTLCWTEFVDIKVHVPCETVDYIE
ANYGKTWKIPIKTWDWKSSPPNVQPNGIWPISEWDEVIQLY

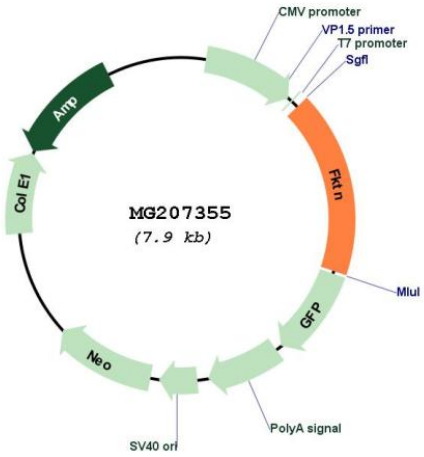
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_139309

ORF Size: 1383 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_139309.2, NP_647470.1
RefSeq Size:	3384 bp
RefSeq ORF:	1386 bp
Locus ID:	246179
UniProt ID:	Q8R507
Cytogenetics:	4 28.74 cM
Gene Summary:	Catalyzes the transfer of CDP-ribitol to the distal N-acetylgalactosamine of the phosphorylated O-mannosyl trisaccharide (N-acetylgalactosamine-beta-3-N-acetylglucosamine-beta-4-(phosphate-6-)mannose), a carbohydrate structure present in alpha-dystroglycan (DAG1) (PubMed:12471058). This constitutes the first step in the formation of the ribitol 5-phosphate tandem repeat which links the phosphorylated O-mannosyl trisaccharide to the ligand binding moiety composed of repeats of 3-xylosyl-alpha-1,3-glucuronic acid-beta-1 (By similarity). Required for normal location of POMGNT1 in Golgi membranes, and for normal POMGNT1 activity (PubMed:19017726). May interact with and reinforce a large complex encompassing the outside and inside of muscle membranes (PubMed:19017726, PubMed:22922256). Could be involved in brain development (Probable). [UniProtKB/Swiss-Prot Function]