

Product datasheet for **MG216602**

Vps51 (NM_001081041) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Vps51
Synonyms:	1110014N23Rik; 3110057M17Rik; A1837850; Ffr
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >MG216602 representing NM_001081041
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGCGCTGCGGCAGCTGTGGGCCTGGCCTAGGGTCCGGCCTGGAGACTCCCCAGAAGTCCCAGG
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GGCTGCAGCAGGTGCAGGTGGACTGCCACTTCTGCAGCTTACTTGTGGCGCTTTGTGGCTGATGAGGA
GCTAGTGCACCTGCTGTGGACGAAGTAGTGCCTCAGCTGCTCTGCGCTGCCGACCCAGTGCCTATG
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

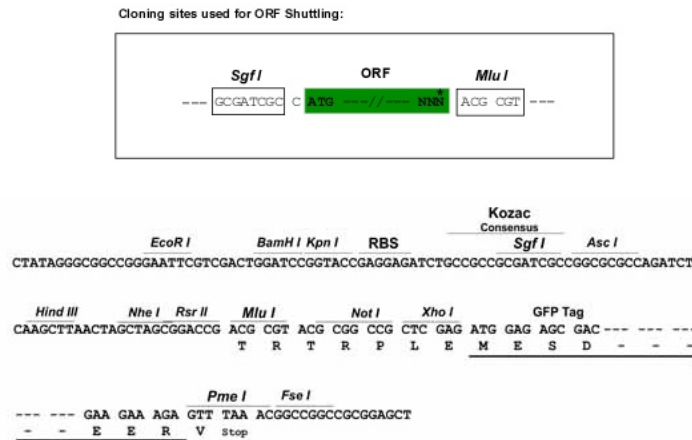
Protein Sequence: >MG216602 representing NM_001081041
 Red=Cloning site Green=Tags(s)

MAAAAAVGPGLGSGPGDSPEGPEADAPERRRKAHGMLKLYYGLSEGEVAGHPAGPDPLDPTDLNGAHFDP
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 TNMAVITNFSARISATLQDRHERITKLAGVHALLRKLQFLFELPSRLTKCVELGAYGQAVRYQGRARAVL
 QQYQHLPFRAIQDDCQVITARLAQQLRQRFREGCSGAPEQAECVELLLALGEPAEELCEEFLAHARGRL
 EEELSLEAELGPSPPADVLEFTDRGGNGFVGGLCQVAAAQELFAAQGPAGAEKLAFAAELGGRYFA
 LVERRLAQEQQGSDNSLLVRALDRFHRRLRAPGALLAAAGLSESATEIVERVARERLSHHLQGLKAAFLS
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 EGLIVGFIRSMCQTAQSFCDSPGKGGATPPALLLLL SRLCLDYETATISYILTLTDEQFLVQDQSPVTP
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 YEEGVRKAQSSDSSKRTFSVYSSSRQQGRYAPSYTPSAPMDTNLLSNIQKLFSEIDVFSPEVFNKVSVL
 TGIKISLKTLLCEVRLRTFGRFGLQVQVDFLQLYLWRFVADEELVHLLLDEVVASAALRCPDPVPM
 EPSVVEICERG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001081041

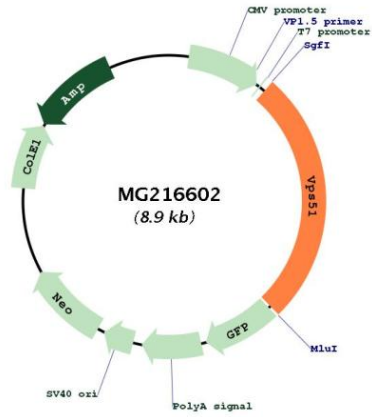
ORF Size: 2346 bp

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:	<ol style="list-style-type: none">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_001081041.1 , NP_001074510.1
RefSeq Size:	2631 bp
RefSeq ORF:	2349 bp
Locus ID:	68505
UniProt ID:	Q3UVL4
Cytogenetics:	19 A
Gene Summary:	Acts as component of the GARP complex that is involved in retrograde transport from early and late endosomes to the trans-Golgi network (TGN). The GARP complex is required for the maintenance of protein retrieval from endosomes to the TGN, acid hydrolase sorting, lysosome function, endosomal cholesterol traffic and autophagy. VPS51 participates in retrograde transport of acid hydrolase receptors, likely by promoting tethering and SNARE-dependent fusion of endosome-derived carriers to the TGN. Acts as component of the EARP complex that is involved in endocytic recycling. The EARP complex associates with Rab4-positive endosomes and promotes recycling of internalized transferrin receptor (TFRC) to the plasma membrane.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG216602