

Product datasheet for **MG202558**

Chmp2a (NM_026885) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Chmp2a (NM_026885) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Chmp2a
Synonyms:	1500016L11Rik; mVps2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG202558 representing NM_026885 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACCTGTTGTTGGGCGCCGGAAGACGCCAGAGGAACTACTTCGGCAAACCAGAGGGCCCTGAACC
GAGCCATGAGAGAACTGGACAGGGAACGACAGAACTAGAAACCCAGGAAAAGAAAATCATTGCGGACAT
CAAAAAGATGGCAAAGCAAGGCCAGATGGATGCTGTTGCAATCATGGCAAAGACCTGGTGCGTACCCGG
AGATATGTACGCAAGTTTGTGTTGATGCGGGCCAACATCCAAGCTGTGTCCCTCAAGATACAGACTCTAA
AATCCAACAACCTCAATGGCACAAGCCATGAAGGGTGTACTAAGGCCATGGGCACTATGAACAGACAGCT
GAAATTACCCAGATCCAGAAGATCATGATGGAGTTTGAACGGCAGGCAGAGATCATGGACATGAAGGAA
GAAATGATGAATGACGCAATTGATGATGCCATGGGTGATGAGGAAGATGAAGAGGAGAGTGATGCTGTTG
TGTCCCAGGTCCTGGATGAGCTGGGACTGAGCCTCACAGATGAGCTGTCAAACCTTCCCTCCACTGGAGG
CTCACTCAGTGTGGCAGCTGGTGGGAAGAAAGCAGAGGCCACAGCCTCAGCCCTGGCTGATGCTGATGCA
GACCTGGAAGAGAGGCTCAAGAACCTTCGACAGGGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG202558 representing NM_026885
Red=Cloning site Green=Tags(s)

MDLLFGRRKTPPELLRQNRALNRMRELDRERQKLETQEKKIIADIKKMAKQGQMDAVRIMAKDLVRTR
 RYVRKFLMRANIQAVSLKIQTLKSNNSMAQAMKGVTKAMGTMNRQLKLPQIQKIMMEFERQAEIMDMKE
 EMMNDAIDDAMGDEEDEEESDAVVSQVLDLGLSLTDEL SNLPSTGGSL SVAAGGKKAEMATASALADADA
 DLEERLKNLRRD

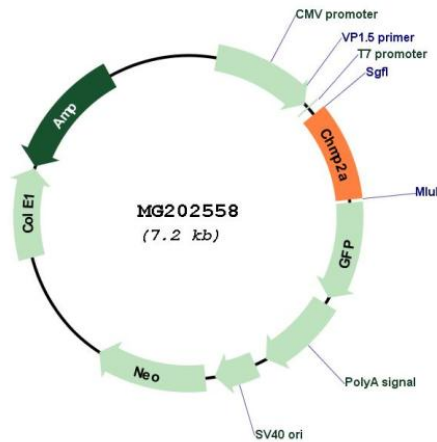
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_026885

ORF Size: 666 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.
RefSeq:	NM_026885.3 , NP_081161.1
RefSeq Size:	881 bp
RefSeq ORF:	669 bp
Locus ID:	68953
UniProt ID:	Q9DB34
Cytogenetics:	7
Gene Summary:	Probable core component of the endosomal sorting required for transport complex III (ESCRT-III) which is involved in multivesicular bodies (MVBs) formation and sorting of endosomal cargo proteins into MVBs. MVBs contain intraluminal vesicles (ILVs) that are generated by invagination and scission from the limiting membrane of the endosome and mostly are delivered to lysosomes enabling degradation of membrane proteins, such as stimulated growth factor receptors, lysosomal enzymes and lipids. The MVB pathway appears to require the sequential function of ESCRT-O, -I, -II and -III complexes. ESCRT-III proteins mostly dissociate from the invaginating membrane before the ILV is released. The ESCRT machinery also functions in topologically equivalent membrane fission events, such as the terminal stages of cytokinesis. Together with SPAST, the ESCRT-III complex promotes nuclear envelope sealing and mitotic spindle disassembly during late anaphase. ESCRT-III proteins are believed to mediate the necessary vesicle extrusion and/or membrane fission activities, possibly in conjunction with the AAA ATPase VPS4.[UniProtKB/Swiss-Prot Function]