

Product datasheet for **RG232545**

Actin Regulatory Protein CAPG (CAPG) (NM_001256139) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Actin Regulatory Protein CAPG (CAPG) (NM_001256139) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CAPG
Synonyms:	AFCP; HEL-S-66; MCP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG232545 representing NM_001256139 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTACACAGCCATTCCCAGAGTGGCTCTCCATTCCCAGGCTCAGTGCAGGATCCAGGCCTGCATGTG
GGCGGGTGGAGAAGCTGAAGCCGGTGCCTGTGGCGCAAGAGAACCAGGGCGTCTTCTTCGGGGGACTC
CTACCTAGTGTGCACAATGGCCAGAAGAGTTTCCCATCTGCACCTGTGGATAGGCCAGCAGTCATCC
CGGATGAGCAGGGGCTGTGCCGTGCTGGCTGTGCACCTCAACACGCTGCTGGGAGAGCGCCTGTGC
AGCACCGCAGGTGCAGGGCAATGAGTCTGACCTTTCATGAGCTACTTCCCACGGGGCTCAAGTACCA
GGAAGGTGGTGTGGAGTCAAGTTTACAAAGACCTCCACAGGAGCCCAGCTGCCATCAAGAACTCTAC
CAGGTGAAGGGAAGAAGAACATCCGTGCCACCGAGCGGGCACTGAACTGGGACAGCTTCAACACTGGGG
ACTGTTTCATCTGGACCTGGGCCAGAACATCTTCGCCTGGTGTGGTGGAAAGTCCAACATCCTGGAACG
CAACAAGGCGAGGGACCTGGCCCTGGCCATCCGGGACAGTGAGCGACAGGGCAAGGCCAGGTGGAGATT
GTCACTGATGGGAGGAGCCTGCTGAGATGATCCAGGTCTGGGCCCAAGCCTGCTCTGAAGGAGGGCA
ACCCTGAGGAAGACCTCACAGCTGACAAGGCAAATGCCAGGCCGAGCTCTGTATAAGGTCTCTGATGC
CACTGGACAGATGAACCTGACCAAGGTGGCTGACTCCAGCCCATTGGCCCTTGAAGTCTGATATCTGAT
GACTGCTTTGTGCTGGACAACGGGCTCTGTGGCAAGATCTATCTGGAAGGGGGAAAAGCGAATGAGA
AGGAGCGCAGGCAGCCCTGCAGGTGGCCGAGGGCTTCACTCGCGCATGCAGTACGCCCCGAACACTCA
GGTGGAGATTCTGCCTCAGGGCCATGAGAGTCCCATCTTCAAGCAATTTTCAAGGACTGAAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG232545 representing NM_001256139
 Red=Cloning site Green=Tags(s)

MYTAIPQSGSPFPGSVQDPGLHVWRVEKLPVPVAQENQGVVFFSGDSYLVLHNGPEEVSHLHLWIGQQSS
 RDEQGCACAVLAVHLNLTLLGERPVQHREVQGNESDLFMSYFPRGLKYQEGGVESAFHKTSTGAPAAIKKLY
 QVKGKKNIRATERALNWD SFNTGDCFILD LGQNI FAWCGGKSNILERNKARDLALAIRDSERQGKAQVEI
 VTDGEEPAEMIQVLGPKPALKEGNPEEDLTADKANAQAAALYKVS DATGQMNLTKVADSSPFALELLISD
 DCFVLDNGLCGKIYIWKGRKANERQAALQVAEGFISRMQYAPNTQVEILPQGHESPIFKQFFKDWK

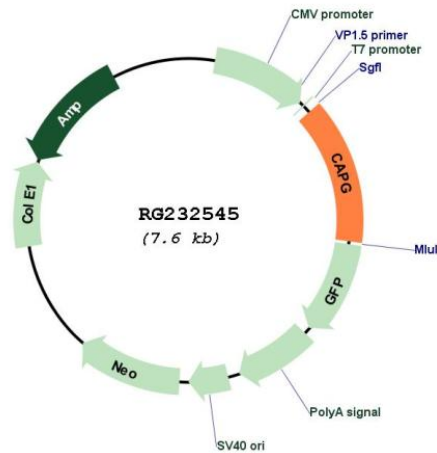
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001256139

ORF Size: 1044 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_001256139.1 , NP_001243068.1
RefSeq Size:	1314 bp
RefSeq ORF:	1047 bp
Locus ID:	822
UniProt ID:	P40121
Cytogenetics:	2p11.2
Gene Summary:	This gene encodes a member of the gelsolin/villin family of actin-regulatory proteins. The encoded protein reversibly blocks the barbed ends of F-actin filaments in a Ca ²⁺ and phosphoinositide-regulated manner, but does not sever preformed actin filaments. By capping the barbed ends of actin filaments, the encoded protein contributes to the control of actin-based motility in non-muscle cells. Alternatively spliced transcript variants have been observed for this gene. [provided by RefSeq, Jan 2012]