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Product datasheet for RG200497

Actin Regulatory Protein CAPG (CAPG) (NM_001747) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Actin Regulatory Protein CAPG (CAPG) (NM_001747) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Actin Regulatory Protein 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:

>RG200497 representing NM_001747
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTACACAGCCATTCCCCAGAGTGGCTCTCCATTCCCAGGCTCAGTGCAGGATCCAGGCCTGCATGTGT
GGCGGGTGGAGAAGCTGAAGCCGGTGCCTGTGGCGCAAGAGAACCAGGGCGTCTTCTTCTCGGGGGACTC
CTACCTAGTGCTGCACAATGGCCCAGAAGAGGTTTCCCATCTGCACCTGTGGATAGGCCAGCAGTCATCC
CGGGATGAGCAGGGGGCCTGTGCCGTGCTGGCTGTGCACCTCAACACGCTGCTGGGAGAGCGGCCTGTGC
AGCACCGCGAGGTGCAGGGCAATGAGTCTGACCTCTTCATGAGCTACTTCCCACGGGGCCTCAAGTACCA
GGAAGGTGGTGTGGAGTCAGCATTTCACAAGACCTCCACAGGAGCCCCAGCTGCCATCAAGAAACTCTAC
CAGGTGAAGGGGAAGAAGAACATCCGTGCCACCGAGCGGGCACTGAACTGGGACAGCTTCAACACTGGGG
ACTGCTTCATCCTGGACCTGGGCCAGAACATCTTCGCCTGGTGTGGTGGAAAGTCCAACATCCTGGAACG
CAACAAGGCGAGGGACCTGGCCCTGGCCATCCGGGACAGTGAGCGACAGGGCAAGGCCCAGGTGGAGATT
GTCACTGATGGGGAGGAGCCTGCTGAGATGATCCAGGTCCTGGGCCCCAAGCCTGCTCTGAAGGAGGGCA
ACCCTGAGGAAGACCTCACAGCTGACAAGGCAAATGCCCAGGCCGCAGCTCTGTATAAGGTCTCTGATGC
CACTGGACAGATGAACCTGACCAAGGTGGCTGACTCCAGCCCCTTTGCCCTTGAACTGCTGATATCTGAT
GACTGCTTTGTGCTGGACAACGGGCTCTGTGGCAAGATCTATATCTGGAAGGGGCGAAAAGCGAATGAGA
AGGAGCGGCAGGCAGCCCTGCAGGTGGCCGAGGGCTTCATCTCGCGCATGCAGTACGCCCCGAACACTCA
GGTGGAGATTCTGCCTCAGGGCCGTGAGAGTCCCATCTTCAAGCAATTTTTCAAGGACTGGAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

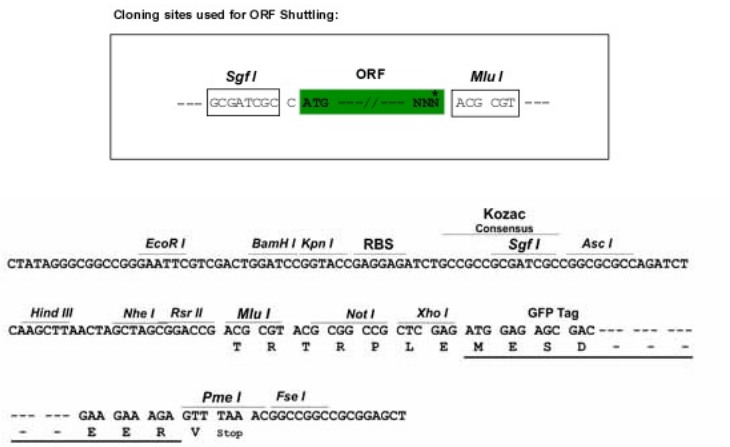
>RG200497 representing NM_001747
Red=Cloning site Green=Tags(s)

MYTAIPQSGSPFPGSVQDPGLHVWRVEKLKPVPVAQENQGVFFSGDSYLVLHNGPEEVSHLHLWIGQQSS
RDEQGACAVLAVHLNTLLGERPVQHREVQGNESDLFMSYFPRGLKYQEGGVESAFHKTSTGAPAAIKKLY
QVKGKKNIRATERALNWDSFNTGDCFILDLGQNIFAWCGGKSNILERNKARDLALAIRDSERQGKAQVEI
VTDGEEPAEMIQVLGPKPALKEGNPEEDLTADKANAQAAALYKVSDATGQMNLTKVADSSPFALELLISD
DCFVLDNGLCGKIYIWKGRKANEKERQAALQVAEGFISRMQYAPNTQVEILPQGRESPIFKQFFKDWK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001747

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: 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_001747.1

RefSeq Size: 1460 bp

RefSeq ORF: 1047 bp

Locus ID: 822

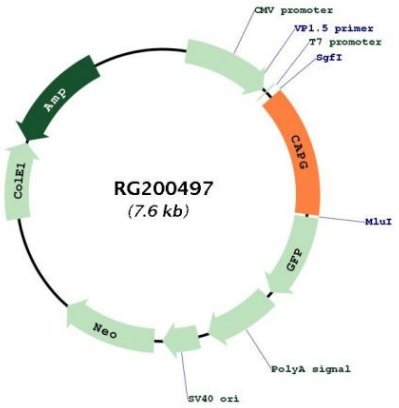
UniProt ID: P40121

Cytogenetics: 2p11.2

Domains: GEL, Gelsolin

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 Ca2+ 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]

Product images:



Circular map for RG200497