

Product datasheet for **RG217100**

AP4E1 (NM_007347) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AP4E1 (NM_007347) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AP4E1
Synonyms:	CPSQ4; SPG51; STUT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG217100 representing NM_007347 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG217100 representing NM_007347
 Red=Cloning site Green=Tags(s)

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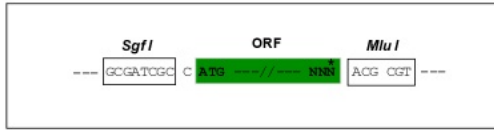
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

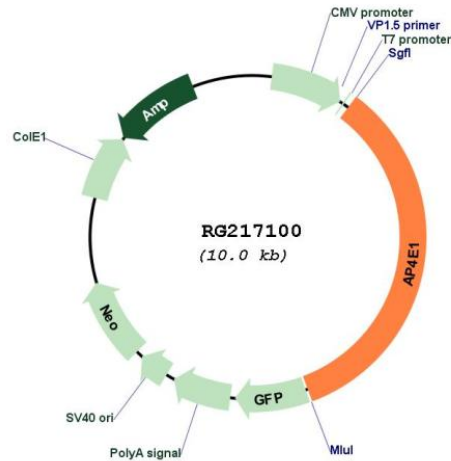


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                                Kozac
                                Consensus
                                Sgf I
                                Asc I
EcoR I      BamH I Kpn I      RBS
CTATAGGCGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCCGCGGATCGCCGGCGCCAGATCT

Hind III   Nhe I   Rsr II   Mlu I           Not I   Xho I           GFP Tag
CAAGCTTAAGTAGCTAGCGGACCG  ACG CGT  ACG CGG CCG CTC GAG  ATG GAG AGC GAC --- --- ---
                               T  R  T  R  P  L  E  M  E  S  D  -  -  -

                                Pme I   Fse I
--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT
- - - E E R  V Stop
    
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Plasmid Map:


ACCN: NM_007347

ORF Size: 3411 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_007347.5](#)

RefSeq Size: 6768 bp

RefSeq ORF: 3414 bp

Locus ID: 23431

UniProt ID: [Q9UPM8](#)

Cytogenetics: 15q21.2

Protein Pathways: Lysosome

Gene Summary: This gene encodes a member of the adaptor complexes large subunit protein family. These proteins are components of the heterotetrameric adaptor protein complexes, which play important roles in the secretory and endocytic pathways by mediating vesicle formation and sorting of integral membrane proteins. The encoded protein is a large subunit of adaptor protein complex-4, which is associated with both clathrin- and nonclathrin-coated vesicles. Disruption of this gene may be associated with cerebral palsy. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Nov 2011]