

Product datasheet for **RG230580**

DAP5 (EIF4G2) (NM_001172705) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DAP5 (EIF4G2) (NM_001172705) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	EIF4G2
Synonyms:	AAG1; DAP5; NAT1; P97
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG230580 representing NM_001172705
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

GTGGAGAGTGCATTGCAGAAGGGGTGCTTCTCGTTTCAGTGCTTCTTCGGGCGGAGGAGGAAGTAGGG
 GTGCACCTCAGCACTATCCCAAGACTGCTGGCAACAGCGAGTTCCTGGGAAAACCCAGGGCAAAACGC
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 AAAGAACGACATGATGCAATCTTCAGGAAAGTAAGAGGCATACTAAATAAGCTTACTCTGAAAAGTTTG
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 GAAGATGCACCAAACCTTGTATGGCCAGCAGAGGGTCAACCAGGACAGAAGCAAAGCACCACATTCA
 GACGCTCCTAATTTCCAAATACAAGATGAATTTGAAAACCGAACTAGAAATGTTGATGTCTATGATAA
 GCGTGAATAATCCCTCCTCCCGAGGAGGAGAACAGAGAGCCATTGCTAAGATCAAGATGTTGGGAAAC
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 GAATCAGTGGCTAACCTGGTTAGAACTGCTGAAGAAGAAGAATCAGAGGAAGAAGCTGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - **GTTTAA**

Protein Sequence: >RG230580 representing NM_001172705
 Red=Cloning site Green=Tags(s)

VESIAIEGGASRFSASSGGGSRGAPQHYPKTAGNSEFLGKTPGQNAQKWIPARSTRRDDNSAANNSANE
 KERHDAIFRKVRGILNKLTPKFDKLCLELLNVGVESKILKGVILLIVDKALEEPKYSSLYAQLCLRLA
 EDAPNFDGPAEAGQPQKQSTTFRRLIISKLQDEFENRTRNVVYDKRENPLPEEEEEQRAIAKIKMLGN
 IKFIGELGKLDLIESILHKCIKTLLEKKKRVQLKDMGEDLECLCQIMRTVGPRLDHERAKSLMDQYFAR
 MCSLMLSKELPARIRFLLQDVELREHHWVPRKAFLDNGPKTINQIRQDAVKDLGVFIPAPMAQGMRSDF
 FLEGPFMPPRMKMDRDLGGLADMFGQMPGSGIGTGPGVIQDRFSPTMGRHRSNQLFNHGGHIMPPTQS
 QFGEMGGKFMKSQGLSQLYHNQSQGLLSQLQGQSKDMPPRFSKKGQLNADEISLRPAQSFMLMKNQVPKL
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 ANEAVNGVREMRAPKHFLEPMLSKVIIISLDRSDEDKEKASSLISLLKQEGIATSDNFMQAFNLVLDQCP
 KLEVDIPLVKSILAQFAARAIISELVSISELAQPLESGTHFPLFLLCLQLAKLQDREWLTFLFQQSKVN
 MQKMLPEIDQNKDRMLEILEGKLSFLFPLLKLEKELLKQIKLDPSPQTIYKWKIDNISPKLHVDKGFVN
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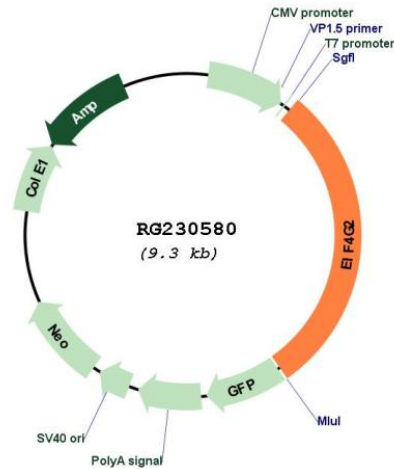
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001172705

ORF Size: 2721 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_001172705.1](#), [NP_001166176.1](#)

RefSeq Size: 4028 bp

RefSeq ORF: 2724 bp

Locus ID: 1982

UniProt ID: [P78344](#)

Cytogenetics: 11p15.4

Protein Families: Transcription Factors

Protein Pathways: Viral myocarditis

Gene Summary: Translation initiation is mediated by specific recognition of the cap structure by eukaryotic translation initiation factor 4F (eIF4F), which is a cap binding protein complex that consists of three subunits: eIF4A, eIF4E and eIF4G. The protein encoded by this gene shares similarity with the C-terminal region of eIF4G that contains the binding sites for eIF4A and eIF3; eIF4G, in addition, contains a binding site for eIF4E at the N-terminus. Unlike eIF4G, which supports cap-dependent and independent translation, this gene product functions as a general repressor of translation by forming translationally inactive complexes. In vitro and in vivo studies indicate that translation of this mRNA initiates exclusively at a non-AUG (GUG) codon. Alternatively spliced transcript variants encoding different isoforms of this gene have been described. [provided by RefSeq, Jul 2008]