

Product datasheet for **RG213837**

PGAP1 (NM_024989) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PGAP1 (NM_024989) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PGAP1
Synonyms:	Bst1; ISPD3024; MRT42; NEDDSBA; SPG67
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG213837 representing NM_024989
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTTTCTTCACTCAGTTAATCTCTGGAACCTGGCGTTTTATGTCTTCATGGTCTTTCTGGCAACCTGG
 GGCTGTGGGATGTCTTCTCGGCTTCGAGGAGAATAAGTGCAGTATGAGCTACATGTTTGAGTACCGGA
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 ATTCCTTTTACTCCATGCATTATGCAACTTTATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG213837 representing NM_024989
 Red=Cloning site Green=Tags(s)

MFLHSVNLWNLAFYVFMVFLATLGLWDVFFGFEEENKCSMSYMFYPEYQKIELPKKLAKRYPAYELLYG
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 QKQTKFVHECIKILKL YKGQEFAPKSVAIIGHSMGGLVARALL TLKNFKHDLINLLITQATPHVAVPMP
 LDRFITDFYTTVNNYWILNARHINL TTLSVAGGFRDYQVRSGL TFLPKLSHHTSALS SVSSAVPKTWST
 DHL SI VWCKQLQLTTVRAFFDL IDADTKQITQNSKKLSVLYHHFIRHPSKHFEENPAIIISDLTGTSMWV
 LVK VSKWTVYAYNESEKIYFTFPLENHRKIYTHVYCQSTMLDTNSWIFACINSTSMCLQGVDLSWKAELL
 PTIKYLT LRLQDYPSLSHLVVYVPSVRGSKFVVDCEFFKKEKRYIQLPVTHLFSFGLSSRKVVLNTNGLY
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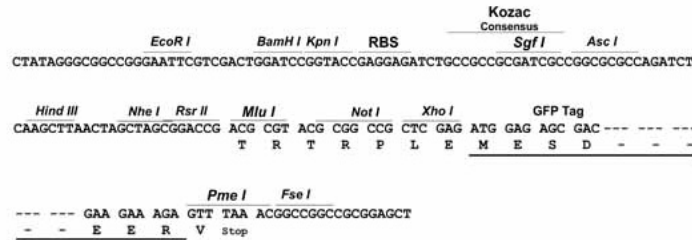
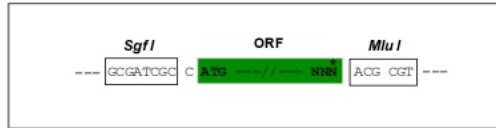
TRTRPLE - GFP Tag - V

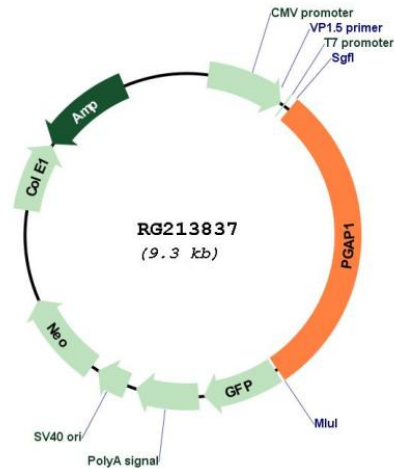
Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_024989

ORF Size: 2766 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_024989.4](#)

RefSeq Size: 11113 bp

RefSeq ORF: 2769 bp

Locus ID: 80055

UniProt ID: [Q75T13](#)

Cytogenetics: 2q33.1

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Glycosylphosphatidylinositol(GPI)-anchor biosynthesis, Metabolic pathways

Gene Summary: The protein encoded by this gene functions early in the glycosylphosphatidylinositol (GPI) biosynthetic pathway, catalyzing the inositol deacylation of GPI. The encoded protein is required for the production of GPI that can attach to proteins, and this may be an important factor in the transport of GPI-anchored proteins from the endoplasmic reticulum to the Golgi. Defects in this gene are a cause an autosomal recessive form of cognitive impairment. [provided by RefSeq, Jul 2017]