

Product datasheet for **RG240145**

GAPex 5 (GAPVD1) (NM_001282681) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GAPex 5 (GAPVD1) (NM_001282681) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GAPex 5
Synonyms:	GAPex-5; GAPEX5; RAP6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG240145 representing NM_001282681. Blue=ORF Red=Cloning site Green=Tag(s)

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GATCCGGTACCGAGGAGATCTGCCGCC**CGGATCGCC**
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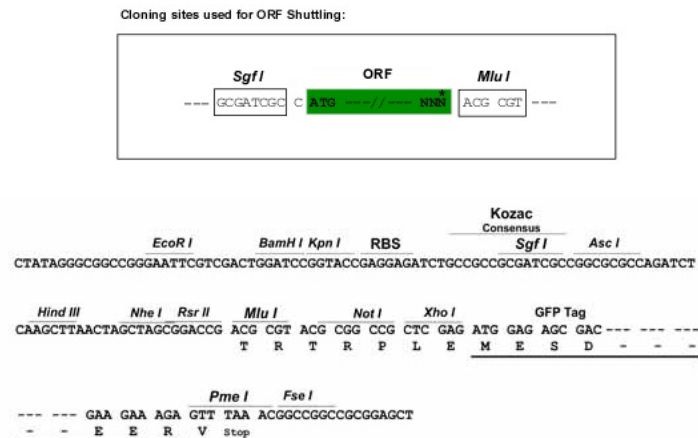
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

Protein Sequence: >Peptide sequence encoded by RG240145
Blue=ORF Red=Cloning site Green=Tag(s)

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Restriction Sites: SgfI-MluI

Cloning Scheme:

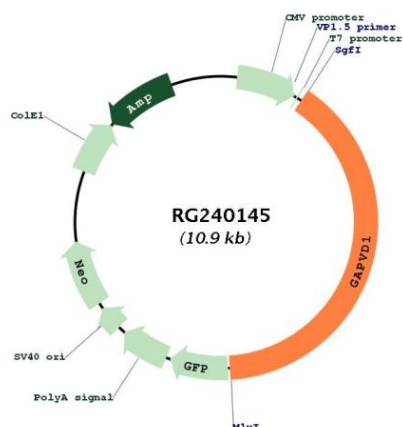


ACCN: NM_001282681

ORF Size: 4380 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).
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001282681.2
RefSeq Size:	6634 bp
RefSeq ORF:	4320 bp
Locus ID:	26130
UniProt ID:	Q14C86
Cytogenetics:	9q33.3
MW:	161.1 kDa
Gene Summary:	Acts both as a GTPase-activating protein (GAP) and a guanine nucleotide exchange factor (GEF), and participates in various processes such as endocytosis, insulin receptor internalization or LC2A4/GLUT4 trafficking. Acts as a GEF for the Ras-related protein RAB31 by exchanging bound GDP for free GTP, leading to regulate LC2A4/GLUT4 trafficking. In the absence of insulin, it maintains RAB31 in an active state and promotes a futile cycle between LC2A4/GLUT4 storage vesicles and early endosomes, retaining LC2A4/GLUT4 inside the cells. Upon insulin stimulation, it is translocated to the plasma membrane, releasing LC2A4/GLUT4 from intracellular storage vesicles. Also involved in EGFR trafficking and degradation, possibly by promoting EGFR ubiquitination and subsequent degradation by the proteasome. Has GEF activity for Rab5 and GAP activity for Ras.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG240145