

Product datasheet for **SC338049**

GAPex 5 (GAPVD1) (NM_001282680) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GAPex 5 (GAPVD1) (NM_001282680) Human Untagged Clone
Tag:	Tag Free
Symbol:	GAPVD1
Synonyms:	GAPex-5; GAPEX5; RAP6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001282680, the custom clone sequence may differ by one or more nucleotides

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ATGGTGAAACTAGATATTCATACTCTGGCTCATCACCTCAAGCAGGAACGCTTATATGTAAGCTCTGAGA
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CATGCAGCTTTCGGATGGAGGACAAGGAGATGTCCCTGTTGATGAAAACAACTCCATGGTAAACCTGAT
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 GCGGATGACTTTGTTCTGTGTTGGTGTGTTGTGTTGATAAAGGCCAAATCCACCCTGTTTGTGTCTACTG
 TGCAGTATATCAGTAGCTTTTATGCTAGCTGTCTGTCTGGAGAGGAGTCCATTGGTGGATGCAGTTCAC
 AGCAGCAGTAGAATTCAATTAACCATCGATGACCGAAAGTGA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_001282680
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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_001282680.1](#), [NP_001269609.1](#)

RefSeq Size: 7029 bp

RefSeq ORF: 4383 bp

Locus ID: 26130

UniProt ID: [Q14C86](#)

Cytogenetics: 9q33.3

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]