



## Rabbit Anti-GAPex5 antibody

SL13283R

<b>Product Name:</b>	GAPex5
<b>Chinese Name:</b>	Rab5激活蛋白6抗体
<b>Alias:</b>	GAPEX 5; GAPVD1; GTPase activating protein and VPS9 domains 1; KIAA1521; Rab5 activating protein 6; RAP6; GAPD1 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Cow,Horse,Rabbit,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	145kDa
<b>Cellular localization:</b>	cytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human GAPex5/GAPVD1/RAP6:1151-1250/1478
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	GAPVD1 is a 1478 amino acid peripheral membrane protein that acts both as a GTPase-activating protein (GAP) and a guanine nucleotide exchange factor (GEF). GAPVD1 participates in many processes such as insulin receptor internalization, Glut4 trafficking and endocytosis. In addition, depletion of GAPVD1 leads to delayed EGFR degradation by mediating receptor ubiquitination through its RGD domain, suggesting that it may be

an important mediator of carcinogenesis resulting from Ras protein mutations. There are six isoforms of GAPVD1 that are produced as a result of alternative splicing events.

**Function:**

GAPex 5 plays a role in several processes such as endocytosis, insulin receptor internalisation and LC2A4/GLUT4 trafficking. It acts as both a GTPase-activating protein (GAP) and a guanine nucleotide exchange factor (GEF). GAPex 5 is a GEF for the small G protein Rab31, promoting the exchange of GDP bound to Rab31 for GTP and thus regulating LC2A4/GLUT4 trafficking. In the absence of insulin, GAPex 5 maintains Rab31 in an active (GTP-bound) state, thereby promoting a futile cycle between LC2A4/GLUT4 storage vesicles and early endosomes, keeping LC2A4/GLUT4 inside the cells. Following insulin stimulation, GAPex 5 is translocated to the plasma membrane, enabling the release of LC2A4/GLUT4 from the intracellular storage vesicles. GAPex 5 is also involved in EGFR trafficking and degradation, and also has GEF activity for Rab5 and GAP activity for Ras.

**Subunit:**

Interacts with TRIP10/CIP4 (By similarity). Interacts with RAB5A.

**Subcellular Location:**

Cell Membrane (peripheral membrane protein) and Cytoplasmic.

**Similarity:**

Belongs to the GAPVD1 family.  
Contains 1 Ras-GAP domain.  
Contains 1 VPS9 domain.

**SWISS:**

Q14C86

**Gene ID:**

26130

**Database links:**

[Entrez Gene: 26130](#)Human

[Olim: 611714](#)Human

[SwissProt: Q14C86](#)Human

[Unigene: 495134](#)Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

