

# Rabbit Anti-phospho-GAB2 (Tyr452) antibody

## SL3178R

Product Name:	phospho-GAB2 (Tyr452)
Chinese Name:	磷酸化接头蛋白Gab 2抗体
Alias:	GAB 2; Gab2; GAB2_HUMAN; Grb 2 associated binder 2; GRB 2 associated binding protein 2; Grb2 associated binder 2; GRB2 associated binder 2 pp100; GRB2 associated binding protein 2; GRB2-associated binder 2; GRB2-associated binding protein 2; Growth factor receptor bound protein 2 associated protein 2; Growth factor receptor bound protein 2; KIAA0571; p97; PH domain containing adaptor molecule p97; pp100.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	74kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human GAB2 around the phosphorylation site of Tyr452:DN(p-Y)VP
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	<u>PubMed</u>

This gene is a member of the GRB2-associated binding protein (GAB) gene family. These proteins contain pleckstrin homology (PH) domain, and bind SHP2 tyrosine phosphatase and GRB2 adapter protein. They act as adapters for transmitting various signals in response to stimuli through cytokine and growth factor receptors, and T- and B-cell antigen receptors. The protein encoded by this gene is the principal activator of phosphatidylinositol-3 kinase in response to activation of the high affinity IgE receptor. Two alternatively spliced transcripts encoding different isoforms have been described for this gene. [provided by RefSeq, Nov 2009]

#### **Function:**

Adapter protein which acts downstream of several membrane receptors including cytokine, antigen, hormone, cell matrix and growth factor receptors to regulate multiple signaling pathways. Regulates osteoclast differentiation mediating the TNFRSF11A/RANK signaling. In allergic response, it plays a role in mast cells activation and degranulation through PI-3-kinase regulation. Also involved in the regulation of cell proliferation and hematopoiesis.

### Subunit:

Interacts with SHC1; may mediate interaction with receptors (By similarity). Interacts with SYK (By similarity). Interacts with PI-3 kinase. Interacts with GRB2 (via SH3 2 domain). Interacts (phosphorylated) with PTPN11. Interacts with TNFRSF11A (via cytoplasmic domain). Interacts (phosphorylated) with 14-3-3 family proteins SFN, YWHAB, YWHAE, YWHAG, YWHAH, YWHAQ and YWHAZ; prevents interaction with GRB2 and attenuates GAB2 signaling. Interacts with HCK.

## **Subcellular Location:**

Cytoplasm. Cell membrane.

### Post-translational modifications:

Phosphorylated on tyrosine residue(s) by the thrombopoietin receptor (TPOR), stem cell factor receptor (SCFR), and T-cell and B-cell antigen receptors, gp130, IL-2R and IL-3R (By similarity). Phosphorylated upon stimulation of TNFRSF11A/RANK by TNFSF11/RANKL (By similarity). Phosphorylated upon EGF stimulation. Phosphorylated on tyrosine residues by HCK upon IL6 signaling. Dephosphorylated by PTPN11.

### Similarity:

Belongs to the GAB family. Contains 1 PH domain.

#### **SWISS:**

Q9UQC2

# Gene ID:

9846

### Product Detail:

#### Database links:

Entrez Gene: 9846Human

Entrez Gene: 14389Mouse

Entrez Gene: 84477Rat

Omim: 606203Human

SwissProt: Q9UQC2Human

SwissProt: Q9Z1S8Mouse

SwissProt: Q9EQH1Rat

Unigene: 429434Human

Unigene: 42033 Mouse

Unigene: 211990Rat

### **Important Note:**

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