



Rabbit Anti-Phospho-Gab1 (Tyr627) antibody

SL3165R

Product Name:	Phospho-Gab1 (Tyr627)
Chinese Name:	磷酸化接头蛋白Gab 1抗体
Alias:	GAB1 (phospho Y627); Gab1(Phospho-Tyr627); p-Gab1 (Tyr627); GRB 2 associated binder 1; GRB 2 associated binding protein 1; GRB2 associated binding protein 1 isoform a; GRB2 associated binding protein 1 isoform bl; Gab 1; Gab1; GAB1_HUMAN; GRB2 associated binder 1; GRB2 associated binding protein 1 isoform b; GRB2-associated binder 1; GRB2-associated-binding protein 1; Growth factor receptor bound protein 2-associated protein 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,
Applications:	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.
Molecular weight:	76kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human Gab1 around the phosphorylation site of Tyr627:VE(p-Y)LD
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:	PubMed

Growth factor triggering of protein tyrosine kinase receptors induces signals that cascade to the nucleus, activating mitogenic as well as other responses. Critical components of this process include adapter proteins such as Shc, IRS-1 and Gab 1 (GRB-associated binder-1) that lack detectable catalytic activity (1-3,8). Gab1 can be phosphorylated by multiple receptor tyrosine kinase (RTKs), including: insulin receptor (IR), platelet derived growth factor receptor beta] (PDGFRbeta]), hepatocyte growth factor/scatter factor receptor (HGFR/SFR or c Met), and epidermal growth factor receptor (EGF), as well as in response to cell cell adhesion. Gab1 is tyrosine phosphorylated on at least 16 sites, some of which serve as binding sites for phosphatidylinositol 3 kinase (PI3K), Grb2, PLC gamma 1, Nck, and SHP2. Phosphorylation of Gab1 on tyrosines 627 and 659 is critical for its binding to SHP2, and for activation of the ERK/MAPK pathway in response to EGF.

Function:

Adapter protein that plays a role in intracellular signaling cascades triggered by activated receptor-type kinases. Plays a role in FGFR1 signaling. Probably involved in signaling by the epidermal growth factor receptor (EGFR) and the insulin receptor (INSR).

Subunit:

Interacts with GRB2 and with other SH2-containing proteins. Interacts with phosphorylated LAT2. Interacts with PTPRJ. Identified in a complex containing FRS2A, GRB2, GAB1, PIK3R1 and SOS1.

Post-translational modifications:

Phosphorylated in response to FGFR1 activation. Phosphorylated on tyrosine residue(s) by the epidermal growth factor receptor (EGFR) and the insulin receptor (INSR). Tyrosine phosphorylation of GAB1 mediates interaction with several proteins that contain SH2 domains.

Similarity:

Belongs to the GAB family.
Contains 1 PH domain.

SWISS:

Q13480

Gene ID:

2549

Database links:

[Entrez Gene: 2549](#)Human

[Entrez Gene: 14388](#)Mouse

[Entrez Gene: 361388](#)Rat

Product Detail:

[Omim: 604439](#)Human

[SwissProt: Q13480](#)Human

[SwissProt: Q9QYY0](#)Mouse

[Unigene: 618456](#)Human

[Unigene: 80720](#)Human

[Unigene: 277409](#)Mouse

[Unigene: 1725](#)Rat

Important Note:

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

Gab1作为一种分布广泛的接头蛋白,几乎能连接所有类型的受体(如酪氨酸激酶受体、G-蛋白偶联受体、cell factor与抗原受体等, Gab1蛋白属于接头蛋白Gab家族,该家族蛋白因能与生长因子受体Binding protein2(Grb2)相结合而得名。作为接头蛋白,Gab1蛋白能被多种受体酪氨酸激酶或非受体酪氨酸激酶激活,接受胞外多种生长因子、cell factor和一些T/B细胞抗原受体的刺激,介导PI3K/Akt和Ras/MAPK等多条Signal transduction途径,具有促进细胞生长、迁移、调节免疫等多种生物学功能,与Diabetes、Tumour、Cardiovascular疾病等的发生发展密切相关。