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Store at -20C
#3231

Phospho-Gab1 (Tyr627) Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H R Mk	Sensitivity: Endogenous	MW (kDa): 110	Source/Isotype: Rabbit	UniProt ID: #Q13480	Entrez-Gene Id: 2549
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Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Phospho-Gab1 (Tyr627) Antibody detects endogenous levels of Gab1 only when phosphorylated at tyrosine 627. The antibody may cross-react with phosphorylated Gab2 or Gab3, or with activated receptor tyrosine kinases (RTKs).

Species predicted to react based on 100% sequence homology

Mouse, Hamster

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr627 of human Gab1. Antibodies are purified by protein A and peptide affinity chromatography.

Background

The Grb-associated binder (Gab) family is a family of adaptor proteins recruited by a wide variety of receptor tyrosine kinases (RTKs) such as EGFR, HGFR, insulin receptor, cytokine receptor and B cell antigen receptors. Upon stimulation of RTKs by their cognate ligand, Gab is recruited to the plasma membrane where it is phosphorylated and functions as a scaffold (1-4). Multiple tyrosine phosphorylation sites of Gab1 protein have been identified (5). Phosphorylation of Tyr472 regulates its binding to p85 PI3 kinase (6,7). Phosphorylation of Gab1 at Tyr307, Tyr373 and Tyr407 modulates its association to PLCγ (8). Phosphorylation of Tyr627 and Tyr659 is required for Gab1 binding to and activation of the protein tyrosine phosphatase SHP2 (6,9).

Background References

- Holgado-Madruga, M. et al. (1996) *Nature* 379, 560-564.
- Weidner, K.M. et al. (1996) *Nature* 384, 173-176.
- Takahashi-Tezuka, M. et al. (1998) *Mol. Cell. Biol.* 18, 4109-4117.
- Ingham, R.J. et al. (2001) *J Biol Chem* 276, 12257-65.
- Lehr, S. et al. (1999) *Biochemistry* 38, 151-159.
- Rocchi, S. et al. (1998) *Mol. Endocrinol.* 12, 914-923.
- Yu, C.F. et al. (2001) *J Biol Chem* 276, 32552-8.
- Gual, P. et al. (2000) *Oncogene* 19, 1509-18.
- Cunnick, J.M. et al. (2001) *J Biol Chem* 276, 24380-7.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **R:** Rat **Mk:** Monkey

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