

#12745 Store at -20°C

## Phospho-Gab1 (Tyr659) Antibody

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP	H	Endogenous	110	Rabbit	#Q13480	2549

## Product Usage Information

## Application

Western Blotting

## Dilution

1:1000

Immunoprecipitation

1:50

## 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 (Tyr659) Antibody recognizes endogenous levels of Gab1 protein only when phosphorylated at Tyr659.

## Species predicted to react based on 100% sequence homology:

Mouse, Rat

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr659 of human Gab1 protein. 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.
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- 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.
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## 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

WB: Western Blotting IP: Immunoprecipitation

## Cross-Reactivity Key

H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster  
X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse  
GP: Guinea Pig Rab: rabbit All: all species expected

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