

#3234 Store at -20°C

Phospho-Gab1 (Tyr307) Antibody



✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

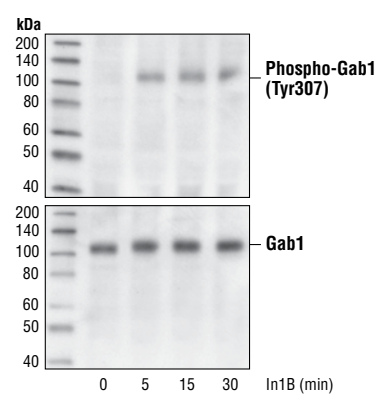
Entrez-Gene ID #2549
Swiss-Prot Acc. #Q13480

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M	115 kDa	Rabbit**

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, undergoes phosphorylation and functions as a multiprotein assembly center (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 PLC-γ (8). Phosphorylation of Tyr627 and Tyr659 is required for Gab1 binding to and activation of the protein tyrosine phosphatase SHP2 (6,9).

Specificity/Sensitivity: Phospho-Gab1 (Tyr307) Antibody detects endogenous levels of Gab1 only when phosphorylated at Tyr307. The antibody cross-reacts with phosphorylated Gab2 and may also cross-react with phosphorylated Gab3. The antibody may cross-react with activated receptor tyrosine kinases (RTKs).

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr307 of human Gab1. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from HEK293 cells, untreated or treated with In1B for indicated times using Phospho-Gab1 (Tyr307) Antibody (upper) or Gab1 Antibody #3232 (lower).

Background References:

- (1) Holgado-Madruga, M. et al. (1996) *Nature* 379, 560-564.
- (2) Weidner, K.M. et al. (1996) *Nature* 384, 173-176.
- (3) Takahashi-Tezuka, M. et al. (1998) *Mol. Cell. Biol.* 18, 4109-4117.
- (4) Ingham, R.J. et al. (2001) *J. Biol. Chem.* 276, 12257-12265.
- (5) Lehr, S. et al. (1999) *Biochemistry* 38, 151-159.
- (6) Rocchi, S. et al. (1998) *Mol. Endocrinol.* 12, 914-923.
- (7) Yu, C.F. et al. (2001) *J. Biol. Chem.* 276, 32552-32558.
- (8) Gual, P. et al. (2000) *Oncogene* 19, 1509-1518.
- (9) Cunnick, J.M. et al. (2001) *J. Biol. Chem.* 276, 24380-24387.

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.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western Blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey 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 All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.