Gab1 Antibody

#3232

Store at –20°C

☑ 100 µl
(10 western blots)

Cell Signaling TECHNOLOGY®

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

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP Endogenous	H, M, R, Mk	110 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 PLCγ (8). Phosphorylation of Tyr627 and Tyr659 is required for Gab1 binding to and activation of the protein tyrosine phosphatase SHP2 (6,9).

Specificity/Sensitivity: Gab1 Antibody detects endogenous levels of total Gab1 protein. This antibody may cross with Gab2 and Gab3.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Tyr472 of human Gab1. Antibodies are purified by protein A and peptide affinity chromatography.

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.

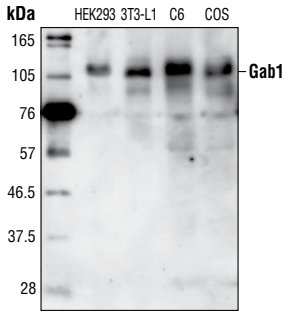
(5) Lehr, S. et al. (1999) *Biochemistry* 38, 151–159.

(6) Rocchi, S. et al. (1998) *Mol. Endocrinol.* 12, 914–923.

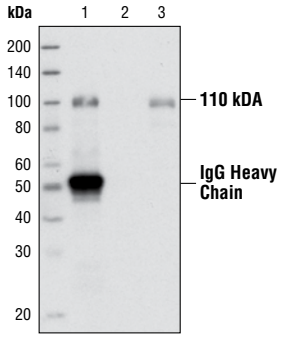
(7) Yu, C.F. et al. (2001) *J. Biol. Chem.* 276, 32552–32558.

(8) Gual, P. et al. (2000) *Oncogene* 19, 1509–1518.

(9) Cunnick, J.M. et al. (2001) *J. Biol. Chem.* 276, 24380–24387.



Western blot analysis of extracts from HEK293, 3T3-L1, C6 and COS cells using Gab1 Antibody.



Immunoprecipitation of Gab 1 from insulin treated Cos cell extracts using Gab 1 antibody (Lane 1). Lane 2: No antibody control. Lane 3: Input control.

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
Immunoprecipitation	1:50

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.