

# Gads (35): sc-136348

## BACKGROUND

The Src homology 3 (SH3) region is a small protein domain of approximately 60 amino acids present in a large group of proteins. In general, it exists in association with catalytic domains, as in the nonreceptor protein-tyrosine kinases and phospholipase C- $\gamma$ , within structural proteins, such as spectrin or Myosin, and in small adapter proteins, such as Crk and GRB2. SH3 domains are often accompanied by SH2 domains of 100 amino acids that bind to tyrosine-phosphorylated regions of target proteins, frequently linking activated growth factors to putative signal transduction proteins. Deletion or mutation of SH3 domains generally activates the transforming potential of nonreceptor tyrosine kinases, suggesting that SH3 mediates negative regulation of an intrinsic transforming activity. Gads is an adapter proteins that contains both SH2 and SH3 domains. Gads binds to tyrosine-phosphorylated proteins, such as Shc, and functions to couple these proteins to downstream effectors.

## REFERENCES

1. Ullrich, A. and Schlessinger, J. 1990. Signal transduction by receptors with tyrosine kinase activity. *Cell* 61: 203-212.
2. Ellis, C., et al. 1990. Phosphorylation of GAP and GAP-associated proteins by transforming and mitogenic tyrosine kinases. *Nature* 343: 377-381.
3. Morrison, D.K., et al. 1990. Platelet-derived growth factor (PDGF)-dependent association of phospholipase C- $\gamma$  with the PDGF receptor signaling complex. *Mol. Cell. Biol.* 10: 2359-2366.
4. Cantley, L.C., et al. 1991. Oncogenes and signal transduction. *Cell* 64: 281-302.
5. Koch, C.A., et al. 1991. SH2 and SH3 domains: elements that control interactions of cytoplasmic signaling proteins. *Science* 252: 669-674.

## CHROMOSOMAL LOCATION

Genetic locus: Grap2 (mouse) mapping to 15 E1.

## SOURCE

Gads (35) is a mouse monoclonal antibody raised against amino acids 169-276 of Gads of mouse origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG $\kappa$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Gads (35) is available conjugated to agarose (sc-136348 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-136348 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-136348 PE), fluorescein (sc-136348 FITC), Alexa Fluor<sup>®</sup> 488 (sc-136348 AF488), Alexa Fluor<sup>®</sup> 546 (sc-136348 AF546), Alexa Fluor<sup>®</sup> 594 (sc-136348 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-136348 AF647), 200  $\mu$ g/ml, for WB (RGB), IF and IHC(P); and to either Alexa Fluor<sup>®</sup> 680 (sc-136348 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-136348 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB and IF.

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## APPLICATIONS

Gads (35) is recommended for detection of Gads of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Gads siRNA (m): sc-40959, Gads shRNA Plasmid (m): sc-40959-SH and Gads shRNA (m) Lentiviral Particles: sc-40959-V.

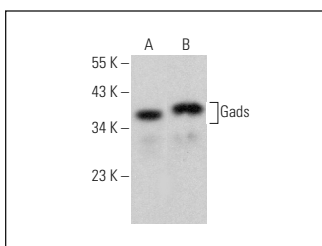
Molecular Weight of Gads: 40 kDa.

Positive Controls: rat spleen extract: sc-2397, BYDP whole cell lysate: sc-364368 or rat lymph node tissue extract.

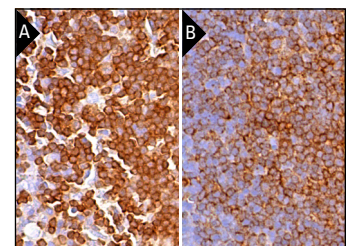
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



Gads (35): sc-136348. Western blot analysis of Gads expression in BYDP whole cell lysate (A) and rat lymph node tissue extract (B).



Gads (35): sc-136348. Immunoperoxidase staining of formalin fixed, paraffin-embedded rat lymph node tissue showing cytoplasmic and membrane staining of cells in germinal center and cells in non-germinal center (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse spleen tissue showing cytoplasmic and membrane staining of cells in white pulp and cells in red pulp (B).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.