

Gab 3 (G-3): sc-271476

BACKGROUND

The Gab (GRB2-associated binder)/DOS (daughter of sevenless) (Gab) family of adaptor proteins function as molecular scaffolds that mediate protein recruitment to RTKs. Cytokine/growth factor triggering of protein tyrosine kinase receptors (RTKs) initiates signaling cascades that progress to the nucleus where signals for activation, proliferation and differentiation occur. This scaffolding mechanism represents a critical link in cytokine/growth factor signaling routes. Gab1-3 contain Pleckstrin homology and potential binding sites for SH2 and SH3 domain-containing proteins. The recruitment of signaling partners to Gab family members is phosphorylation dependent. Insulin receptor and EGF-receptor signaling are among the cascades that rely on Gab family members to elicit a nuclear response to an extracellular stimulus. The human Gab3 gene maps to chromosome Xq28 and encodes a 586 amino acid protein.

REFERENCES

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2. Holgado-Madruga, M., Emler, D.R., Moscatello, D.K., Godwin, A.K. and Wong, A.J. 1996. A GRB2-associated docking protein in EGF- and Insulin-receptor signalling. *Nature* 379: 560-564.
3. Zhao, C., Yu, D.H., Shen, R. and Feng, G.S. 1999. Gab2, a new Pleckstrin homology domain-containing adapter protein, acts to uncouple signaling from ERK kinase to Elk-1. *J. Biol. Chem.* 274: 19649-19654.
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5. Wolf, I., Jenkins, B.J., Liu, Y., Seiffert, M., Custodio, J.M., Young, P. and Rohrschneider, L.R. 2002. Gab3, a new DOS/Gab family member, facilitates macrophage differentiation. *Mol. Cell. Biol.* 22: 231-244.
6. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604439. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. LocusLink Report (LocusID: 139716). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: GAB3 (human) mapping to Xq28.

SOURCE

Gab 3 (G-3) is a mouse monoclonal antibody raised against amino acids 101-400 mapping within an internal region of Gab 3 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Gab 3 (G-3) is recommended for detection of Gab 3 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Gab 3 siRNA (h): sc-40608, Gab 3 shRNA Plasmid (h): sc-40608-SH and Gab 3 shRNA (h) Lentiviral Particles: sc-40608-V.

Molecular Weight of Gab 3: 75 kDa.

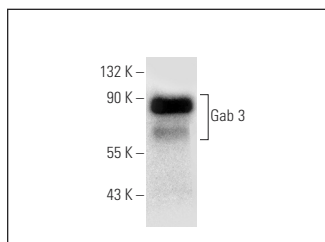
Positive Controls: K-562 whole cell lysate: sc-2203.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® 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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Gab 3 (G-3): sc-271476. Western blot analysis of Gab 3 expression in GM-CSF-treated K-562 whole cell lysate.

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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.