

Gab 2 (H-6): sc-365590

BACKGROUND

Growth factor triggering of protein tyrosine kinase receptors induces signals that cascade to the nucleus, activating mitogenic as well as other responses. Critical components of this process include adapter protein such as Shc, IRS-1 and Gab 1 (GRB-associated binder-1) that lack detectable catalytic activity. These are immediate substrates of receptor tyrosine kinase activity and serve to link activated receptors to downstream signaling components. Whereas Shc has been implicated in signaling by diverse receptor families, IRS-1 serves primarily as the major Insulin receptor substrate. Shc and Gab 1 also participate in Insulin signaling by linking the Insulin receptor to Ras by forming complexes with GRB2 (another adapter protein) and Sos independently of IRS-1. The Gap 1 related protein, Gab 2, associates with SH2 domain-containing proteins, such as SHP2, and it is involved in a novel pathway for cytokine-induced gene activation.

CHROMOSOMAL LOCATION

Genetic locus: GAB2 (human) mapping to 11q14.1; Gab2 (mouse) mapping to 7 E1.

SOURCE

Gab 2 (H-6) is a mouse monoclonal antibody raised against amino acids 121-320 mapping near the N-terminus of Gab 2 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.

Gab 2 (H-6) is available conjugated to agarose (sc-365590 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365590 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365590 PE), fluorescein (sc-365590 FITC), Alexa Fluor® 488 (sc-365590 AF488), Alexa Fluor® 546 (sc-365590 AF546), Alexa Fluor® 594 (sc-365590 AF594) or Alexa Fluor® 647 (sc-365590 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365590 AF680) or Alexa Fluor® 790 (sc-365590 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Gab 2 (H-6) is recommended for detection of Gab 2 of mouse, rat and 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 2 siRNA (h): sc-40606, Gab 2 siRNA (m): sc-40607, Gab 2 shRNA Plasmid (h): sc-40606-SH, Gab 2 shRNA Plasmid (m): sc-40607-SH, Gab 2 shRNA (h) Lentiviral Particles: sc-40606-V and Gab 2 shRNA (m) Lentiviral Particles: sc-40607-V.

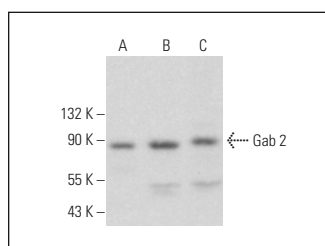
Molecular Weight of Gab 2: 88 kDa.

Positive Controls: WEHI-231 whole cell lysate: sc-2213, M1 whole cell lysate: sc-364782 or K-562 whole cell lysate: sc-2203.

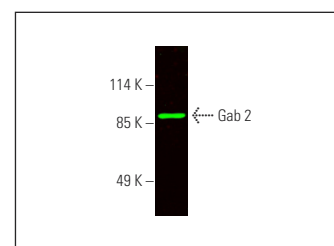
RECOMMENDED SUPPORT REAGENTS

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 2 (H-6): sc-365590. Western blot analysis of Gab 2 expression in M1 (A), WEHI-231 (B) and RAW 264.7 (C) whole cell lysates.



Gab 2 (H-6): sc-365590. Near-infrared western blot analysis of Gab 2 expression in K-562 whole cell lysate. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 680: sc-516180.

SELECT PRODUCT CITATIONS

- Ma, J., et al. 2017. MicroRNA-302a targets Gab 2 to suppress cell proliferation, migration and invasion of glioma. *Oncol. Rep.* 37: 1159-1167.
- Li, J., et al. 2018. MicroRNA-485 plays tumour-suppressive roles in colorectal cancer by directly targeting GAB2. *Oncol. Rep.* 40: 554-564.
- Watanabe, D., et al. 2019. FLT3-ITD activates RSK1 to enhance proliferation and survival of AML cells by activating mTORC1 and eIF4B cooperatively with PIM or PI3K and by inhibiting Bad and BIM. *Cancers* 11: 1827.
- Ren, W.M., et al. 2021. Neuroprotective effects of ZiBuPiYin recipe on db/db mice via PI3K-Akt signaling pathway by activating Grb2. *Neural Plast.* 2021: 8825698.

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.