Gab 1 (H-7): sc-133191

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 proteins 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. Gab 1 is also thought to be involved in the EGF receptor signaling pathway.

CHROMOSOMAL LOCATION

Genetic locus: GAB1 (human) mapping to 4q31.21; Gab1 (mouse) mapping to 8 C2.

SOURCE

Gab 1 (H-7) is a mouse monoclonal antibody raised against amino acids 119-316 of Gab 1 of human origin.

PRODUCT

Each vial contains 200 µg IgG2a Kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Gab 1 (H-7) is available conjugated to agarose (sc-133191 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-133191 HRP), 200 µg/ml, for WB, IHCP) and ELISA; to either phycoerythrin (sc-133191 PE), fluorescein (sc-133191 FITC), Alexa Fluor® 488 (sc-133191 AF488), Alexa Fluor® 546 (sc-133191 AF546), Alexa Fluor® 594 (sc-133191 AF594) or Alexa Fluor® 647 (sc-133191 AF647), 200 µg/ml, for WB (RGB), IF, IHCP and FCM; and to either Alexa Fluor® 680 (sc-133191 AF680) or Alexa Fluor® 790 (sc-133191 AF790), 200 µg/ml, for Near-Infrared (NIR) IF, WB and FCM.

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APPLICATIONS

Gab 1 (H-7) is recommended for detection of Gab 1 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 1 siRNA (h): sc-35431, Gab 1 siRNA (m): sc-35432, Gab 1 shRNA Plasmid (h): sc-35431-SH, Gab 1 shRNA Plasmid (m): sc-35432-SH, Gab 1 shRNA (h) Lentiviral Particles: sc-35431-V and Gab 1 shRNA (m) Lentiviral Particles: sc-35432-V.

Molecular Weight of Gab 1: 110-115 kDa.

Positive Controls: SH-SYSY cell lysate: sc-3812, Gab 1 (m): 293T Lysate: sc-120377 or 3T3-L1 cell lysate: sc-2243.

RECOMMENDED SUPPORT REAGENTS

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

1) Western Blotting: use m-IgGk BP-HRP: sc-16102 or m-IgGk 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-IgGk BP-FITC: sc-516140 or m-IgGk BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Hard-set Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA

![Data Image]

SELECT PRODUCT CITATIONS


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.