

Gab 1 (C-20): sc-6292

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. 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 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Gab 1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6292 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Gab 1 (C-20) is recommended for detection of Gab 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Gab 1 (C-20) is also recommended for detection of Gab 1 in additional species, including equine, canine, bovine, porcine and avian.

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: Gab 1 (h): 293T Lysate: sc-111467, K-562 whole cell lysate: sc-2203 or HeLa whole cell lysate: sc-2200.

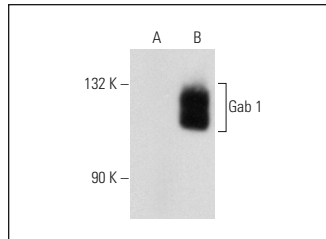
STORAGE

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

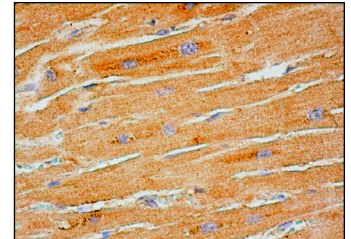
RESEARCH USE

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

DATA



Gab 1 (C-20): sc-6292. Western blot analysis of Gab 1 expression in non-transfected: sc-117752 (A) and human Gab 1 transfected: sc-111467 (B) 293T whole cell lysates.



Gab 1 (C-20): sc-6292. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

SELECT PRODUCT CITATIONS

- Sakkab, D., et al. 2000. Signaling of hepatocyte growth factor/scatter factor (HGF) to the small GTPase Rap 1 via the large docking protein Gab 1 and the adapter protein CRKL. *J. Biol. Chem.* 275: 10772-10778.
- Fan, S., et al. 2001. The multisubstrate adapter Gab 1 regulates hepatocyte growth factor (scatter factor)-c-met signaling for cell survival and DNA repair. *Mol. Cell. Biol.* 21: 4968-4984.
- Alami, J., et al. 2003. Derivation and characterization of a Wilms' tumour cell line, WiT 49. *Int. J. Cancer* 107: 365-374.
- Gembitsky, D.S. 2004. A prototype antibody microarray platform to monitor changes in protein tyrosine phosphorylation. *Mol. Cell. Proteomics* 3: 1102-1118.
- Cramer, A., et al. 2005. Activation of the c-Met receptor complex in fibroblasts drives invasive cell behavior by signaling through transcription factor STAT3. *J. Cell. Biochem.* 95: 805-816.
- Xu, S., et al. 2015. PECAM1 regulates flow-mediated Gab1 tyrosine phosphorylation and signaling. *Cell. Signal.* 28: 117-124.

PROTOCOLS

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



Try **Gab 1 (H-7): sc-133191** or **Gab 1 (G-9): sc-271848**, our highly recommended monoclonal alternatives to Gab 1 (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Gab 1 (H-7): sc-133191**.