# Gab 2 (H-200): sc-25498



The Power to Question

# **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 domaincontaining 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-200) is a rabbit polyclonal antibody raised against amino acids 121-320 mapping near the N-terminus of Gab 2 of human origin.

# **PRODUCT**

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

# **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.

### **APPLICATIONS**

Gab 2 (H-200) is recommended for detection of Gab 2 of mouse, rat and human 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). Gab 2 (H-200) is also recommended for detection of Gab 2 in additional species, including equine, canine, bovine and porcine.

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.

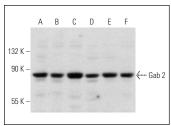
Molecular Weight of Gab 2: 88 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, A549 cell lysate: sc-2413 or OV-90 whole cell lysate: sc-364191.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# **DATA**



Gab 2 (H-200): sc-25498. Western blot analysis of Gab 2 expression in K-562 ( $\bf A$ ), MCP-5 ( $\bf B$ ), OV-90 ( $\bf C$ ), ES-2 ( $\bf D$ ), A549 ( $\bf E$ ) and F9 ( $\bf F$ ) whole cell lysates.

#### **SELECT PRODUCT CITATIONS**

- Mukhopadhyay, I., et al. 2006. Molecular mechanism of adaphostinmediated G<sub>1</sub> arrest in prostate cancer (PC-3) cells: signalling events mediated by hepatocyte growth factor receptor, c-Met, and p38 MAPK pathways. J. Biol. Chem. 281: 37330-37344.
- 2. Selby, P.L., et al. 2006. Canine distemper virus induces human osteoclastogenesis through NF $\kappa$ B and sequestosome 1/P62 activation. J. Bone Miner. Res. 21: 1750-1756.
- De Keersmaecker, K., et al. 2008. Kinase activation and transformation by Nup214-ABL1 is dependent on the context of the nuclear pore. Mol. Cell 31: 134-142.
- Shi, L., et al. 2012. Gab2 expression in glioma and its implications for tumor invasion. Acta Oncol. E-published.
- Hoeben, A., et al. 2013. Role of GRB2-associated binder 1 in epidermal growth factor receptor-induced signaling in head and neck squamous cell carcinoma. Int. J. Cancer 132: 1042-1050.



Try **Gab 2 (H-6): sc-365590**, our highly recommended monoclonal alternative to Gab 2 (H-200).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com