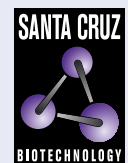


gp130 (AN-H2): sc-9994



The Power to Question

BACKGROUND

IL-6 activates intracellular signaling through binding a receptor consisting of a ligand-binding protein (IL-6R) and a second protein. IL-6 first binds to IL-6R which subsequently associates with a gp130 dimer. The active signaling complex consists of at minimum IL-6, IL-6R and a dimer of two gp130 proteins that are linked by a disulfide bond. A soluble form of IL-6R is generated by proteolytic cleavage of the membrane-bound precursor and can function as an agonistic molecule that can actively participate in cell-to-cell signaling. The second subunit of the IL-6 complex, gp130, also functions as a component of several additional receptor complexes including leukemia inhibitory factor (LIF), oncostatin M (OSM), ciliary neurotrophic factor (CNTF) and IL-11. LIF binds to the LIF receptor with low affinity and to a complex of the LIF receptor and gp130 with high affinity while OSM appears to bind to gp130 with low affinity and to a complex of gp130 and the LIF receptor with high affinity.

CHROMOSOMAL LOCATION

Genetic locus: IL6ST (human) mapping to 5q11.2.

SOURCE

gp130 (AN-H2) is a mouse monoclonal antibody raised against gp130 transfected Sf21 cells 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.

gp130 (AN-H2) is available conjugated to agarose (sc-9994 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-9994 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-9994 PE), fluorescein (sc-9994 FITC), Alexa Fluor® 488 (sc-9994 AF488), Alexa Fluor® 546 (sc-9994 AF546), Alexa Fluor® 594 (sc-9994 AF594) or Alexa Fluor® 647 (sc-9994 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-9994 AF680) or Alexa Fluor® 790 (sc-9994 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

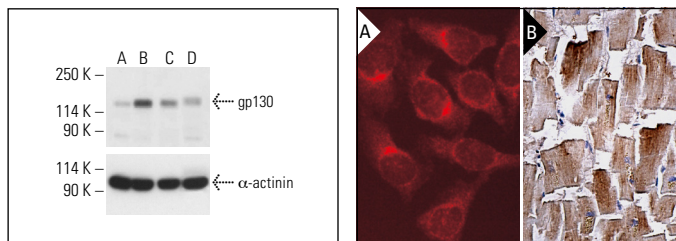
gp130 (AN-H2) is recommended for detection of gp130 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for gp130 siRNA (h): sc-29333, gp130 shRNA Plasmid (h): sc-29333-SH and gp130 shRNA (h) Lentiviral Particles: sc-29333-V.

Molecular Weight of gp130: 130 kDa.

STORAGE

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

DATA

gp130 (AN-H2): sc-9994. Western blot analysis of gp130 expression in untreated (A) and chemically-treated (B, C, D) HEK293T whole cell lysates. Detection reagent used: m-IgG Fc BP-HRP: sc-525409. α -actinin (H-2): sc-17829 used as loading control. Detection reagent used: m-IgG₁ BP-HRP: sc-525408.

gp130 Antibody (AN-H2): sc-9994. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes (B).

SELECT PRODUCT CITATIONS

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- Ho, Y.S., et al. 2009. *Porphyromonas gingivalis* fimbriae-dependent interleukin-6 autocrine regulation by increase of gp130 in endothelial cells. *J. Periodontal Res.* 44: 550-556.
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RESEARCH USE

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