

p-gp130 (Ser 782): sc-12978

BACKGROUND

IL-6 activates intracellular signaling by binding to IL-6R (the IL-6 receptor), which subsequently associates with a second protein, known as gp130. 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. 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. The major phosphorylation site of human gp130 is located immediately N-terminal to the di-leucine motif of gp130, which regulates the internalization of the receptor. Phosphorylation of this site, Ser 782, regulates cell surface expression of the receptor polypeptide.

CHROMOSOMAL LOCATION

Genetic locus: IL6ST (human) mapping to 5q11.2; Il6st (mouse) mapping to 13 D2.2.

SOURCE

p-gp130 (Ser 782) is available as either goat (sc-12978) or rabbit (sc-12978-R) polyclonal affinity purified antibody raised against a short amino acid sequence containing phosphorylated Ser 782 of gp130 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-12978 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p-gp130 (Ser 782)-R is recommended for detection of Ser 782 phosphorylated gp130 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p-gp130 (Ser 782) is also recommended for detection of correspondingly phosphorylated Ser on gp130 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for gp130 siRNA (h): sc-29333, gp130 siRNA (m): sc-35502, gp130 shRNA Plasmid (h): sc-29333-SH, gp130 shRNA Plasmid (m): sc-35502-SH, gp130 shRNA (h) Lentiviral Particles: sc-29333-V and gp130 shRNA (m) Lentiviral Particles: sc-35502-V.

Molecular Weight of p-gp130: 130 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

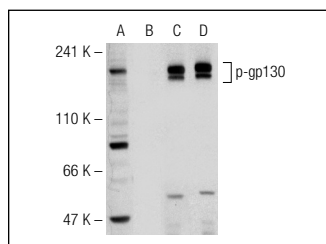
STORAGE

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

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 B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Western Blotting Luminol Reagent: sc-2048 and Lambda Phosphatase: sc-200312A. 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



Western blot analysis of gp130 phosphorylation in untreated (A, C) and lambda protein phosphatase (sc-200312A) treated (B, D) c4 whole cell lysates. Antibodies tested include p-gp130 (Ser 782)-R: sc-12978-R (A, B) and gp130 (M-20): sc-656 (C, D).

SELECT PRODUCT CITATIONS

1. Ateghang, B., Wartenberg, M., Gassmann, M. and Sauer, H. 2006. Regulation of Cardiotrophin-1 expression in mouse embryonic stem cells by HIF-1 α and intracellular reactive oxygen species. *J. Cell. Sci.* 119: 1043-1052.
2. Redvers, R. 2008. The role of interleukin-6/gp130 signaling in prostate cancer progression and its contribution to bone metastasis morbidity. U.S. Army Medical Research.

RESEARCH USE

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

PROTOCOLS

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