

Stat1 p84/p91 (H-95): sc-98783

BACKGROUND

Membrane receptor signaling by various ligands, including interferons and growth hormones such as EGF, induces activation of JAK kinases which then leads to tyrosine phosphorylation of the various Stat transcription factors. Stat1 and Stat2 are induced by IFN α and form a heterodimer which is part of the ISGF3 transcription factor complex. Although early reports indicate Stat3 activation by EGF and IL-6, it has been shown that Stat3 β appears to be activated by both while Stat3 α is activated by EGF, but not by IL-6. Highest expression of Stat4 is seen in testis and myeloid cells. IL-12 has been identified as an activator of Stat4. Stat5 has been shown to be activated by prolactin and by IL-3. Stat6 is involved in IL-4 activated signaling pathways.

CHROMOSOMAL LOCATION

Genetic locus: STAT1 (human) mapping to 2q32.2; Stat1 (mouse) mapping to 1 C1.1.

SOURCE

Stat1 p84/p91 (H-95) is a rabbit polyclonal antibody raised against amino acids 74-165 mapping near the N-terminus of Stat1 p84/p91 of human origin.

PRODUCT

Each vial contains 200 μ g IgG 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.

APPLICATIONS

Stat1 p84/p91 (H-95) is recommended for detection of Stat1 p84/p91 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

Stat1 p84/p91 (H-95) is also recommended for detection of Stat1 p84/p91 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Stat1 p84/p91 siRNA (h): sc-44123, Stat1 p84/p91 siRNA (m): sc-44124, Stat1 p84/p91 siRNA (r): sc-61879, Stat1 p84/p91 shRNA Plasmid (h): sc-44123-SH, Stat1 p84/p91 shRNA Plasmid (m): sc-44124-SH, Stat1 p84/p91 shRNA Plasmid (r): sc-61879-SH, Stat1 p84/p91 shRNA (h) Lentiviral Particles: sc-44123-V, Stat1 p84/p91 shRNA (m) Lentiviral Particles: sc-44124-V and Stat1 p84/p91 shRNA (r) Lentiviral Particles: sc-61879-V.

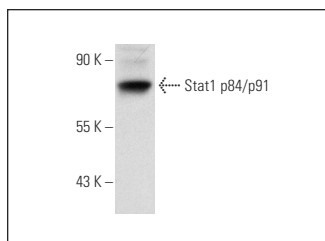
Molecular Weight of Stat1 p84/p91: 86/91 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or K-562 whole cell lysate: sc-2203.

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



Stat1 p84/p91 (H-95): sc-98783. Western blot analysis of Stat1 p84/p91 expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

- Kong, X.F., et al. 2010. A novel form of human STAT1 deficiency impairing early but not late responses to interferons. *Blood* 116: 5895-5906.
- Dimitropoulou, P., et al. 2010. Differential relocation and stability of PML-body components during productive human cytomegalovirus infection: detailed characterization by live-cell imaging. *Eur. J. Cell Biol.* 89: 757-768.
- Wohlmann, A., et al. 2010. Signal transduction by the atopy-associated human thymic stromal lymphopoietin (TSLP) receptor depends on Janus kinase function. *Biol. Chem.* 391: 181-186.
- Zhu, S., et al. 2013. Inhibiting autophagy potentiates the anticancer activity of IFN γ /IFN α in chronic myeloid leukemia cells. *Autophagy* 9: 317-327.

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.



Try **Stat1 p84/p91 (C-136): sc-464** or **Stat1 p84/p91 (B-9): sc-271661**, our highly recommended monoclonal alternatives to Stat1 p84/p91 (H-95). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Stat1 p84/p91 (C-136): sc-464**.