

Stat1 α p91 (C-24): sc-345

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 α p91 (C-24) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of Stat1 α p91 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-345 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-345 X, 200 μ g/0.1 ml.

APPLICATIONS

Stat1 α p91 (C-24) is recommended for detection of Stat1 α 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 α p91 (C-24) is also recommended for detection of Stat1 α p91 in additional species, including equine and canine.

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

Stat1 α p91 (C-24) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Stat1 α p91: 91 kDa.

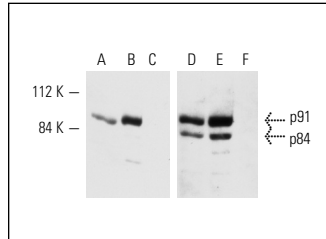
STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

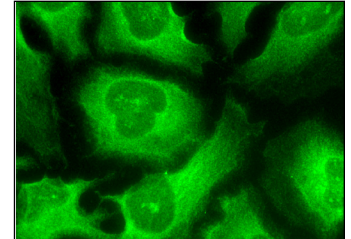
RESEARCH USE

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

DATA



Western blot analysis of Stat1 α p91 and Stat1 β p84 expression in nuclear extracts of phorbol ester-treated HeLa (A, D), A-431 (B, E) and K-562 (C, F) cells. Antibodies include Stat1 α p91 (C-24): sc-345 (A-C) and Stat1 p84/p91 (E-23): sc-346 (D-F).



Stat1 α p91 (C-24): sc-345. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and nuclear localization.

SELECT PRODUCT CITATIONS

- Subramanian, A., et al. 1995. A Stat factor mediates the sexually dimorphic regulation of hepatic cytochrome p450 3A10/lithocholic acid 6 β -hydroxylase gene expression by growth hormone. *Mol. Cell. Biol.* 15: 4672-4682.
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- Knoblauch, T., et al. 2011. Human cytomegalovirus IE1 protein elicits a type II interferon-like host cell response that depends on activated STAT1 but not interferon- γ . *PLoS Pathog.* 7: e1002016.
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- Joe, Y., et al. 2011. Tristetraprolin mediates anti-inflammatory effects of nicotine in lipopolysaccharide-stimulated macrophages. *J. Biol. Chem.* 286: 24735-24742.
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- Chapat, C., et al. 2013. hCAF1/CNOT7 regulates interferon signalling by targeting STAT1. *EMBO J.* 32: 688-700.


 MONOS
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Try **Stat1 α p91 (C-111): sc-417** or **Stat1 α p91 (H-1): sc-398524**, our highly recommended monoclonal alternatives to Stat1 α p91 (C-24).