

Stat2 (L-20): sc-950

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: STAT2 (human) mapping to 12q13.3; Stat2 (mouse) mapping to 10 D3.

SOURCE

Stat2 (L-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of Stat2 of mouse origin.

PRODUCT

Each vial contains 200 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-950 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-950 X, 200 μ g/0.1 ml.

APPLICATIONS

Stat2 (L-20) is recommended for detection of Stat2 p113 of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Stat2 siRNA (h): sc-29492, Stat2 siRNA (m): sc-37272, Stat2 shRNA Plasmid (h): sc-29492-SH, Stat2 shRNA Plasmid (m): sc-37272-SH, Stat2 shRNA (h) Lentiviral Particles: sc-29492-V and Stat2 shRNA (m) Lentiviral Particles: sc-37272-V.

Stat2 (L-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Stat2: 113 kDa.

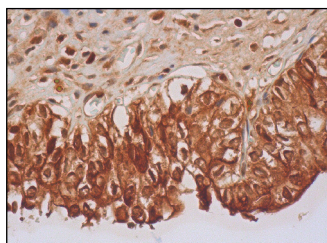
STORAGE

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.

DATA



Stat2 (L-20): sc-950. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic and nuclear staining of urothelial cells.

SELECT PRODUCT CITATIONS

1. Cho, S.J., et al. 2005. A Stat5-overlapping site is critical for the IgJ enhancer activity in the plasma cells and bound by a ubiquitous protein. *Biochem. Biophys. Res. Commun.* 338: 1897-1905.
2. Mudter, J., et al. 2005. Activation pattern of signal transducers and activators of transcription (Stat) factors in inflammatory bowel diseases. *Am. J. Gastroenterol.* 100: 64-72.
3. Khorrooshi, R., et al. 2008. NF κ B-driven Stat2 and CCL2 expression in astrocytes in response to brain injury. *J. Immunol.* 181: 7284-7291.
4. Filipowicz, M., et al. 2009. Interferon α induces long-lasting refractoriness of JAK-Stat signaling in the mouse liver through induction of USP18/UBP43. *Mol. Cell. Biol.* 29: 4841-4851.
5. Hippe, D., et al. 2009. *Toxoplasma gondii* infection confers resistance against BimS-induced apoptosis by preventing the activation and mitochondrial targeting of pro-apoptotic Bax. *J. Cell Sci.* 122: 3511-3521.
6. Molle, C., et al. 2010. Critical role of the IFN-stimulated gene factor 3 complex in TLR-mediated IL-27p28 gene expression revealing a two-step activation process. *J. Immunol.* 184: 1784-1792.
7. Makowska, Z., et al. 2011. Interferon- β and interferon- λ signaling is not affected by interferon-induced refractoriness to interferon- α *in vivo*. *Hepatology* 53: 1154-1163.
8. Begitt, A., et al. 2014. STAT1-cooperative DNA binding distinguishes type 1 from type 2 interferon signaling. *Nat. Immunol.* 15: 168-176.

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Try **Stat2 (B-3): sc-514193** or **Stat2 (A-9): sc-166201**, our highly recommended monoclonal alternatives to Stat2 (L-20).