

# Stat2 (N-17): sc-839

## 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- $\alpha$  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 $\beta$  appears to be activated by both while Stat3 $\alpha$  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 (N-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of Stat2 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-839 P, (100  $\mu$ 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-839 X, 200  $\mu$ g/0.1 ml.

## APPLICATIONS

Stat2 (N-17) is recommended for detection of Stat2 p113 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

Stat2 (N-17) is also recommended for detection of Stat2 p113 in additional species, including equine, canine, bovine and porcine.

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 (N-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Stat2: 113 kDa.

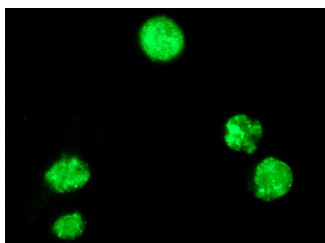
## STORAGE

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



Stat2 (N-17): sc-839. Immunofluorescence staining of methanol-fixed Ramos cells showing nuclear localization.

## SELECT PRODUCT CITATIONS

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- Knoblach, 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- $\gamma$ . *PLoS Pathog.* 7: e1002016.
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- Zhang, Z., et al. 2015. Interferon regulatory factor 1 marks activated genes and can induce target gene expression in systemic lupus erythematosus. *Arthritis Rheumatol.* 67: 785-796.

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Try **Stat2 (B-3): sc-514193** or **Stat2 (A-9): sc-166201**, our highly recommended monoclonal alternatives to Stat2 (N-17).