# SANTA CRUZ BIOTECHNOLOGY, INC.

# Stat5b (1-49): sc-4106 WB



## 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 fators. 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 is 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.

# REFERENCES

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#### SOURCE

Stat5b (1-49) is expressed in *E. coli* as a 32 kDa tagged fusion protein corresponding to amino acids 1-49 raised against a peptide mapping within the amino terminal domain of Stat5b protein of mouse origin.

#### PRODUCT

Stat5b (1-49) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10  $\mu g$  in 0.1 ml SDS-PAGE loading buffer.

## APPLICATIONS

Stat5b (1-49) is suitable as a Western blotting control for sc-836.

#### **STORAGE**

Store at -20° C; stable for one year from the date of shipment.

#### **RESEARCH USE**

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