



Catalog No: 39059 RRID: AB\_2793152 Isotype: Serum

Application(s): WB Reactivity: Human

Volume: 100 µl Purification: None Host: Rabbit

Molecular Weight: 91 kDa

**Background:** STAT1 is a member of the STAT family of transcription factors. STATs undergo tyrosine and serine phosphorylation in response to growth factor or cytokine signaling. This phosphorylation results in dimerization and translocation of STAT proteins to the nucleus. STAT1 is alternatively spliced to give rise to STAT1α and STAT1β, both of which mediate interferon α activity, but only STAT1α mediates interferon-γ activity. STAT1 plays a critical role in various forms of cell death, both apoptotic and non-apoptotic. The mechanisms of action are both by transcriptional activation of target genes, and by direct association with apoptotic regulators, including TRADD, p53, and HDAC (HDAC1, HDAC2, HDAC3, HDAC4, HDAC5, HDAC6 and HDAC11). STAT1 target genes include the pro-inflammatory genes for iNOS, COX, VCAM, and ICAM, making STAT1 an attractive anti-inflammatory target.

**Immunogen:** This STAT1 $\alpha$  antibody was raised against a synthetic peptide corresponding to amino acid residues 712-750 of human STAT1 $\alpha$ .

**Buffer:** PBS containing 0.2% gelatin, 0.01% thimerosal and 0.1% sodium azide. Thimerosal and sodium azide are highly toxic.

## **Application Notes:**

Applications Validated by Active Motif:

WB: 1:500 - 1:1,000 dilution

For optimal results, primary antibody incubations should be performed at 37°C. Individual optimization may be required.

**Storage and Guarantee:** Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



STAT1α pAb tested by Western blot.

Detection of STAT1α by Western blot analysis. STAT1α was detected in whole-cell extracts derived from T-47D cells using STAT1α rabbit polyclonal antibody at a 1:500 dilution. Several uncharacterized bands of approximately 78 and 140 kDa may also be revealed under the same conditions.