**p-Stat3 (23G5): sc-56747**

**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 Stat3β appears to be activated by both while Stat3α 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 Progesterone and by IL-3. Stat6 is involved in IL-4 activated signaling pathways.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: STAT3 (human) mapping to 17q21.2; Stat3 (mouse) mapping to 11 D.

**SOURCE**

p-Stat3 (23G5) is a mouse monoclonal antibody raised against a Stat3 phosphopeptide of human origin.

**PRODUCT**

Each vial contains 50 µg IgG1 in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin, PEG and sucrose.

**APPLICATIONS**

p-Stat3 (23G5) is recommended for detection of Ser 727 phosphorylated Stat3 of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].


Molecular Weight of p-Stat3α: isoform 91 kDa.

Molecular Weight of p-Stat3β: isoform 86 kDa.

Positive Controls: Stat3 (h3): 293T Lysate: sc-177985, HeLa + IFN-γ cell lysate: sc-2222 or 3T3-L1 cell lysate: sc-2243.

**DATA**

Western blot analysis of Stat3 phosphorylation in untreated (A,D), mouse LIF (sc-4989) treated (B,E) and LIF and lambda protein phosphatase (sc-200012A) treated (C,F) 3T3-L1 whole cell lysates. Antibodies tested include p-Stat3 (23G5): sc-56747 (A,B,C) and Stat3 (F-2): sc-8019 (D,E,F).

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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