

## **STAT1 Polyclonal Antibody**

Catalog Number: E90027

Amount: 100ul

Background: The Stat1 transcription factor is activated in response to a large number of ligands (1) and is

essential for responsiveness to IFN- $\alpha$  and IFN- $\gamma$  (2,3). Phosphorylation of Stat1 at Tyr701 induces Stat1 dimerization, nuclear translocation, and DNA binding (4). Stat1 protein exists as a pair of isoforms, Stat1 $\alpha$  (91 kDa) and the splice variant Stat1 $\beta$  (84 kDa). In most cells, both isoforms are activated by IFN- $\alpha$ , but only Stat1 $\alpha$  is activated by IFN- $\gamma$ . The inappropriate activation of Stat1 occurs in many tumors (5). In addition to tyrosine phosphorylation, Stat1 is also phosphorylated at Ser727 through a p38 mitogen-activated protein kinase (MAPK)-dependent pathway in response to IFN- $\alpha$  and other cellular stresses (6). Serine phosphorylation may be required for the maximal induction of Stat1-mediated

gene activation.

**Species:** Rabbit **Isotype:** IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide,

50% glycerol, pH7.3.

**Synonyms:** STAT1;DKFZp686B04100;ISGF-3;STAT91; **Immunogen:** Recombinant protein of human STAT1

**Purification:** Affinity purification

Reactivity: H M R
Applications: WB IHC
Molecular Weight: 83kDa
Swiss-Prot No.: P42224
Gene ID: 6772

References: 1. Heim, M.H. (1999) J. Recept. Signal. Transduct. Res. 19, 75-120. 2. Durbin, J.E. et al.

(1996) Cell 84, 443-450. 3. Meraz, M.A. et al. (1996) Cell 84, 431-442. 4. Ihle, J.N. et al. (1994) Trends Biochem. Sci. 19, 222-227. 5. Frank, D.A. (1999) Mol. Med. 5, 432-456. 6.

Wen, Z. et al. (1995) Cell 82, 241-250.

