

## Anti-Stat3 Polyclonal Antibody

<b>CATALOG NO:</b>	3470R-30T	30 µg (Trial size)
	3470R-100	100 µg
<b>HOST:</b>	Rabbit	
<b>IMMUNOGEN:</b>	Synthetic peptide surrounding amino acid 73 of rat Stat3 (Internal ID# BV-B58).	
<b>SPECIES REACTIVITY:</b>	Human, Mouse, Rat	

### FORMULATION:

0.5 mg/ml purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

### STORAGE CONDITIONS:

Store at -20°C. For long term storage, aliquot and freeze at -70°C. Avoid repeated freeze/thaw cycles.

### BACKGROUND:

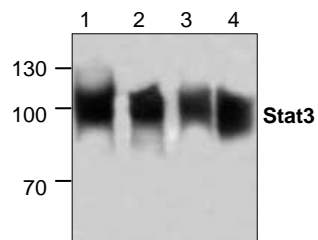
Membrane receptor signaling by various ligands induces activation of Jak kinases which then leads to tyrosine phosphorylation of the various Stat transcription factors. Stat1 and Stat2 are induced by IFN- $\alpha$  and form a heterodimer which is part of the ISGF3 transcription factor complex. Although 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 is activated by prolactin and by IL-3. Stat6 is involved in IL-4 activated signaling pathways.

### SPECIFICITY:

The antibody recognizes ~97 kDa Stat3 in samples from human, mouse, and rat origins. Reactivity to other species has not been tested.

### APPLICATION:

The antibody can be used in Western blotting (0.5-4 µg/ml). However, the optimal concentrations should be determined individually. Blocking peptide (Cat.# 3470RBP-50) is available separately.



**Cat.# 3470R-100**  
Western blot analysis of Stat3 in lysate from Jurkat cells (Lane 1 & 2), 3T3 cells (Lane 3) and rat kidney (Lane 4).

### RELATED PRODUCTS:

#### Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

#### Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

#### Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

#### Cell Damage & Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

#### Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

#### Adipocyte & Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

#### Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- $\beta$ -Galactosidase Staining Kit & Luciferase Reporter Assay Kit

#### Growth Factors and Cytokines

#### Monoclonal and Polyclonal Antibodies