# **BioVision**

## **Anti-Stat3 Polyclonal Antibody**

**CATALOG #:** 3470R-100

**AMOUNT:** 100 μg

LOT #:

HOST: Rabbit

**IMMUNOGEN:** Synthetic peptide surrounding amino acid 73 of rat Stat3

(Internal ID# BV-B58).

SPECIES REACTIVITY: Human, Mouse, Rat

#### **FORMULATION:**

100 μg (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/defrost cycles.

#### BACKGROUND:

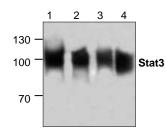
Membrane receptor signaling by various ligands induces activation of Jak kinases which then leads to tyrosine phosphorylation of the various Stat transcription factors. Stat1 and Stat2 are induced by IFN- $\alpha$  and form a heterodimer which is part of the ISGF3 transcription factor complex. Although 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 (Lane4).

#### FOR RESEARCH USE ONLY! Not to be used on humans.

#### **RELATED PRODUCTS:**

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- 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

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- 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

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- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

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- PLTP Activity Assay & Drug Discovery Kits
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- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β -Galactosidase Staining Kit & Luciferase Reporter Assay Kit

**Growth Factors and Cytokines** 

Monoclonal and Polyclonal Antibodies