# BioVision

# **STAT4 Polyclonal Antibody**

CATALOG NO:	3471R-30T 3471R-100	30 μg (Trial size) 100 μg
HOST:	Rabbit	
IMMUNOGEN:	Synthetic peptide surrounding amino acid 732 of rat Stat4 (ID# BV-B59)	
SPECIES REACTIVITY:	Human, Mouse, Rat, Pig	

#### FORMULATION:

0.5 mg/ml affinity 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:

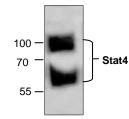
Membrane receptor signaling by various ligands induces activation of Jak kinases which then leads to tyrosine phosphorylation of the various Stat transcription factors. Stat1 and Stat2 are induced by IFN- $\alpha$  and form a heterodimer which is part of the ISGF3 transcription factor complex. Although 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 Stat4 in samples from human, mouse, and rat origins. A ~60 kDa band can also be detected, presumably to be the cleavage fragment of Stat4.

### APPLICATION AND USAGE:

The antibody can be used in Western blotting (0.5-4  $\mu$ g/ml). However, the optimal concentrations should be determined individually. Blocking peptide (Cat.# 3471RBP-50) is available separately.



Cat.#: 3471R-100 Western blot analysis of Stat4 expression in rat kidney tissue lysate

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