

# AbboMax, Inc

Innovation at Work

## Rabbit anti-Phospho- STAT4 (pTyr<sup>693</sup>)

Synonym: Signal transducer and activator of transcription 4 (STAT4)

### Order Information

Description: Rabbit anti Phospho-STAT4(pY693)  
Catalogue#: 500-12064  
Lot#: See the label  
Size: 100 ug/200 ul  
Host: Rabbit  
Clone: N/A  
Application: ELISA, WB, IHC  
Reactivity: Hu, Rt, Ms, Dg.

### ANTIGEN PREPARATION

A synthetic peptide surrounding to the epitope -KGYVP- with phosphorylation sites at Tyr693 of STAT4 protein from human, mouse, rat, chicken dog and bovine origins.

### BACKGROUND

STAT proteins (Signal transducer and activator of transcription) belong to a family of cytoplasmic transcription factors that can be phosphorylated by a ligand binding to its cell surface receptor. Activation of STAT4 induces dimerization, nuclear translocation and DNA binding. STAT4 protein expression is restricted to the thymus, spleen and testis. Both tyrosine and serine residues on STAT4 become phosphorylated in response to IL-12 or IFN- $\alpha$  although serine phosphorylation is not required for DNA binding. STAT4 is activated in T-cells in response to the cytokine interleukin-12 (IL-12), and in NK cells by IL-2. STAT4-deficient mice display impaired IL-12 development of Th1 cells and enhanced development of Th2 cells.

### PURIFICATION

The Rabbit IgG is purified by site-modified Epitope Affinity Purification.

### SPECIFICITY

This antibody recognizes STAT4 (pY693) with a phosphorylated sites of Tyr693. It does not cross-react with non-phosphospecific peptide.

### FORMULATION

This affinity purified antibody is supplied in sterile Tris-buffered saline (pH7.2) containing antibody stabilizer

### STORAGE

The antibodies are stable for 12 months from date of receipt when stored at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$ . The antibodies can be stored at  $2^{\circ}\text{C}$ - $8^{\circ}\text{C}$  for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

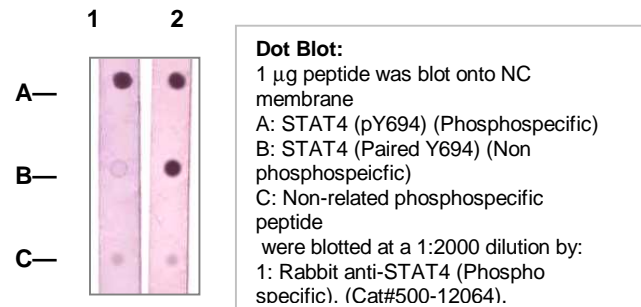
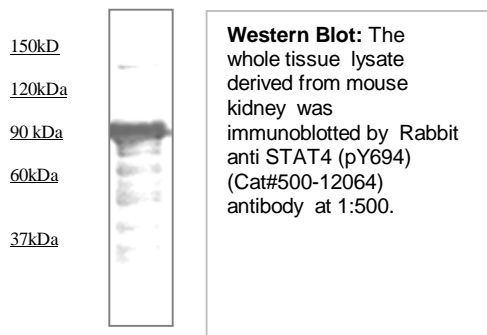
### APPLICATIONS/SUGGESTED WORKING DILUTIONS

Western Blot	0.1-1 $\mu\text{g/ml}$
ELISA	0.01-0.1 $\mu\text{g/ml}$
Immunoprecipitation	2-5 $\mu\text{g/ml}$
IHC	1:50 $\mu\text{g/ml}$
Flow cytometry	Not tested

<b>MOLECULAR WEIGHT:</b>	90 kDa
<b>POSITIVE CONTROL:</b>	Mouse kidney
<b>CELLULAR LOCATION:</b>	Nuclear

Optimal dilutions should be determined by researchers for the specific applications.

### DATA ATTACHMENTS



### REFERENCES

Takuya Miyagi, et al. High basal STAT4 balanced by STAT1 induction to control type 1 interferon effects in natural killer cells. J Exp Med. 2007 October 1; 204(10): 2383-2396.

**FOR RESEARCH USE ONLY.**

AbboMax, Inc 1161 Ringwood Ct. Suite 100, San Jose, California 95131, USA  
1 408-321-9898 (Tel). 1 408-321-9896 (Fax). 1-866-628-9898 www.abbomax.com info@abbomax.com