

## STAT3 (Phospho-Tyr705) Polyclonal Antibody

### ORDERING INFORMATION

**Catalog No.:** 43045

**Format:** 100ul at 1.0mg/ml in PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Affinity-purified on phosphopeptide; non-phosphopeptide-reactive antibodies were removed by chromatography on non-phosphorylated peptide.

### BACKGROUND

Signal transducers and activators of transcription (STATs) are transcription factors that play important roles in signaling pathways induced by many different cytokines and growth factors that regulate cell growth and differentiation, the immune response, antiviral activity, and homeostasis. Their activation and mechanisms of action are examples of direct signaling to the nucleus by extracellular polypeptide ligands without the involvement of second messengers, tyrosine phosphorylation of transcription factors, or transcription factors that make direct contact with membrane-bound receptors and DNA. Since the discovery of STAT 1 and 2, the family has been expanded to seven members.

### SPECIFICATION SUMMARY

**Antigen:** Peptide sequence that includes phosphorylation site of tyrosine 705 (A-P-Y(p)-L-K) derived from human STAT3 and conjugated to KLH.

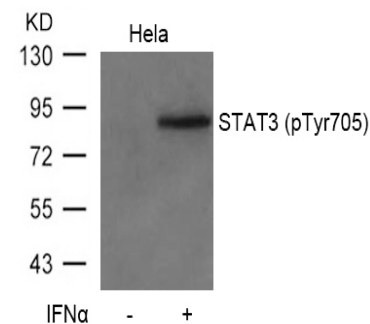
**Accession no.:** P40763, NP\_003141.2

**Host Species:** Rabbit

**Specificity:** This antibody detects endogenous human, mouse, and rat STAT3 only when phosphorylated at tyrosine 705.

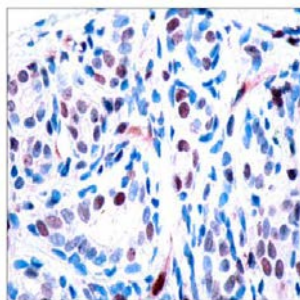
### APPLICATION

**Immunoblotting:** use at dilution of 1:500-1:1,000. A band of ~88kDa is detected.

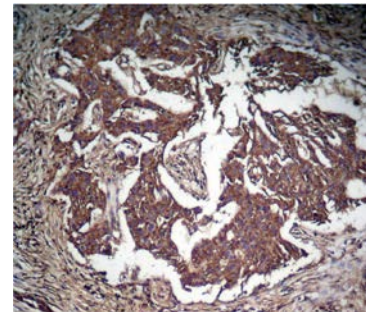


Detection of STAT3 (phospho-Tyr705) in extracts of HeLA cells treated or untreated with IFN $\alpha$ .

**Immunohistochemistry:** use at dilution of 1:50-1:100.



Detection of STAT3 (phospho-Tyr705) in paraffin-embedded human breast carcinoma tissue.



Detection of STAT3 (phospho-Tyr705) in paraffin-embedded human lung carcinoma tissue.

These are recommended working dilutions. Enduser should determine optimal dilutions for their applications.

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### DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

### STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Can be stored at 4°C for short-term use.

*For in vitro investigational use only. Not intended for therapeutic or diagnostic applications.*