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# Stat4 (phospho Tyr693) Polyclonal Antibody

Catalog # AP67184

## Product Information

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| **Application** | WB, IHC-P, IF, ICC, IP, E |
| **Primary Accession** | Q14765 |
| **Reactivity** | Human, Mouse, Rat, Monkey |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 85941 |

## Additional Information

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| **Gene ID** | 6775 |
| **Other Names** | STAT4; Signal transducer and activator of transcription 4 |
| **Dilution** | WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunoprecipitation: 2-5 ug/mg lysate. ELISA: 1/5000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A IP~~N/A E~~N/A |
| **Format** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| **Storage Conditions** | -20℃ |

## Protein Information

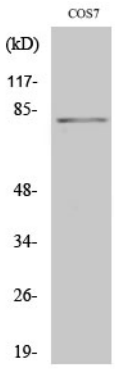
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|---|---|
| **Name** | STAT4 |
| **Function** | Transcriptional regulator mainly expressed in hematopoietic cells that plays a critical role in cellular growth, differentiation and immune response (PubMed:10961885, PubMed:37256972, PubMed:8943379). Plays a key role in the differentiation of T-helper 1 cells and the production of interferon-gamma (PubMed:12213961, PubMed:35614130). Also participates in multiple neutrophil functions including chemotaxis and production of the neutrophil extracellular traps (By similarity). After IL12 binding to its receptor IL12RB2, STAT4 interacts with the intracellular domain of IL12RB2 and becomes tyrosine phosphorylated (PubMed:10415122, PubMed:7638186). Phosphorylated STAT4 then homodimerizes and migrates to the nucleus where it can recognize STAT target sequences present in IL12 responsive genes. Although IL12 appears to be the predominant activating signal, STAT4 can also be phosphorylated and activated in response to IFN-gamma stimulation via JAK1 and TYK2 and in response to different interleukins including IL23, IL2 and IL35 (PubMed:11114383, PubMed:34508746). Transcription activation of IFN-gamma gene is mediated by interaction with JUN that forms a complex that efficiently interacts with the AP-1-related |

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| | sequence of the IFN-gamma promoter (By similarity). In response to IFN-alpha/beta signaling, acts as a transcriptional repressor and suppresses IL5 and IL13 mRNA expression during response to T-cell receptor (TCR) activation (PubMed:26990433). |
| **Cellular Location** | Cytoplasm. Nucleus. Note=Translocated into the nucleus in response to phosphorylation. |

## Background

Carries out a dual function: signal transduction and activation of transcription. Involved in IL12 signaling.

## Images




Western Blot analysis of various cells using Phospho-Stat4 (Y693) Polyclonal Antibody diluted at 1：2000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.