

STAT4 Rabbit mAb

Catalog # AP76721

Specification

STAT4 Rabbit mAb - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, IHC
O14765
Human
Rabbit
Monoclonal Antibody

85941

STAT4 Rabbit mAb - Additional Information

Gene ID 6775

Other Names STAT4

DilutionWB~~1/500-1/1000
IHC~~1/50-1/100

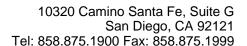
Format Liquid

STAT4 Rabbit mAb - Protein Information

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: <a $href="http://www.uniprot.org/citations/12213961" \ target="_blank">12213961, PubMed:<all pubmed:$ href="http://www.uniprot.org/citations/35614130" target="_blank">35614130). Participates also 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 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.

STAT4 Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

STAT4 Rabbit mAb - Images

