

STAT2 Antibody

Rabbit mAb Catalog # AP90866

## Specification

# STAT2 Antibody - Product Information

ApplicationWB, IHC, ICCPrimary AccessionP52630ReactivityRatClonalityMonoclonalOther NamesHomo sapiens interferon alpha induced transcriptional activator; ISGF 3; P113; signal transducer<br/>and activator of transcription 2 113kD; STAT113; Stat2;

| Isotype       | Rabbit IgG |
|---------------|------------|
| Host          | Rabbit     |
| Calculated MW | 97916 Da   |

### **STAT2 Antibody - Additional Information**

| Dilution                     | WB~~1:1000<br>IHC~~1:100~500  |
|------------------------------|---|
| Purification<br>Immunogen    | ICC~~N/A<br>Affinity-chromatography<br>A synthesized peptide derived from human<br>STAT2  |
| Description                  | STAT2 (113-kDa), originally purified from<br>the nuclei of alpha-interferon-treated cells,<br>is critical to the transcriptional responses<br>induced by type I interferons,<br>IFN-alpha/beta. Stat2 is rapidly activated<br>by phosphorylation at Tyr690 in response<br>to stimulation by IFN-alpha/beta via<br>associations with receptor-bound Jak<br>kinases |
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline ,<br>pH 7.4, 150mM NaCl, 0.02% sodium azide<br>and 50% glycerol. Store at +4°C short<br>term. Store at -20°C long term. Avoid<br>freeze / thaw cycle.   |

### **STAT2 Antibody - Protein Information**

Name STAT2

#### Function

Signal transducer and activator of transcription that mediates signaling by type I interferons (IFN-alpha and IFN-beta). Following type I IFN binding to cell surface receptors, Jak kinases (TYK2 and JAK1) are activated, leading to tyrosine phosphorylation of STAT1 and STAT2. The



phosphorylated STATs dimerize, associate with IRF9/ISGF3G to form a complex termed ISGF3 transcription factor, that enters the nucleus. ISGF3 binds to the IFN stimulated response element (ISRE) to activate the transcription of interferon stimulated genes, which drive the cell in an antiviral state (PubMed:<a href="http://www.uniprot.org/citations/23391734"">http://www.uniprot.org/citations/23391734</a>

target="\_blank">23391734</a>, PubMed:<a href="http://www.uniprot.org/citations/9020188" target="\_blank">9020188</a>). In addition, also has a negative feedback regulatory role in the type I interferon signaling by recruiting USP18 to the type I IFN receptor subunit IFNAR2 thereby mitigating the response to type I IFNs (PubMed:<a

href="http://www.uniprot.org/citations/28165510" target="\_blank">28165510</a>). Acts as a regulator of mitochondrial fission by modulating the phosphorylation of DNM1L at 'Ser-616' and 'Ser-637' which activate and inactivate the GTPase activity of DNM1L respectively (PubMed:<a href="http://www.uniprot.org/citations/23391734" target="\_blank">23391734</a>, PubMed:<a href="http://www.uniprot.org/citations/26122121" target="\_blank">26122121</a>, PubMed:<a href="http://www.uniprot.org/citations/26122121" target="\_blank">26122121</a>, PubMed:<a href="http://www.uniprot.org/citations/26122121" target="\_blank">20102188</a>, PubMed:<a href="http://www.uniprot.org/citations/26122121" target="\_blank">20102188</a>, PubMed:<a href="http://www.uniprot.org/citations/26122121" target="\_blank">20102188</a>, PubMed:<a href="http://www.uniprot.org/citations/9020188" target="\_blank">9020188</a>).

**Cellular Location** 

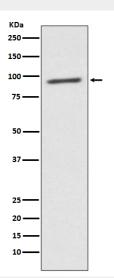
Cytoplasm. Nucleus Note=Translocated into the nucleus upon activation by IFN-alpha/beta

### **STAT2 Antibody - Protocols**

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

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

#### **STAT2 Antibody - Images**



Western blot analysis of STAT2 expression in K562 cell lysate.