

**Stat2 Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10339****Specification**

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**Stat2 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P52630</a>
Other Accession	<a href="#">CAE45713.1</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	97916

**Stat2 Antibody - Additional Information****Gene ID 6773**

Application & Usage	Western blotting (0.5-4 µg/ml), However, the optimal concentrations should be determined individually. The antibody recognizes ~113 kDa of Stat2 from samples of human, mouse and rat origins. Reactivity to other species has not been determined.
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**Other Names**

STAT2 , ISGF-3 , P113 , p113 , STAT113 , MGC59816

**Target/Specificity**

STAT2

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µg (0.5 mg/ml) affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions**

**Precautions**

Stat2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**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" 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/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.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Stat2 Antibody - Images****Stat2 Antibody - Background**

Membrane receptor signaling by various ligands induces activation of Jak kinases which then leads to tyrosine phosphorylation of the various Stat transcription factors. Stat1 and Stat2 are induced by IFN- $\alpha$  and form a heterodimer which is part of the ISGF3 transcription factor complex. Although early reports indicate Stat3 activation by EGF and IL-6, it has been shown that Stat3 $\beta$  appears to be activated by both while Stat3 $\alpha$  is activated by EGF, but not by IL-6. Highest expression of Stat4 is seen in testis and myeloid cells. IL-12 has been identified as an activator of Stat4. Stat5 is activated by prolactin and by IL-3. Stat6 is involved in IL-4 activated signaling pathways.