

**STAT2 Polyclonal Antibody**  
**Catalog # AP63615****Specification**

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**STAT2 Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P52630</a>
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal

**STAT2 Polyclonal Antibody - Additional Information****Gene ID** 6773**Other Names**

Signal transducer and activator of transcription 2 (p113)

**Dilution**WB~~Western Blot: 1/500 - 1/2000.IHC-p:1:50-300. Not yet tested in other applications.  
IHC-P~~N/A**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**STAT2 Polyclonal 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 DNMI1 at 'Ser-616' and 'Ser-637' which activate and inactivate the GTPase activity of DNMI1 respectively (PubMed:<a href="http://www.uniprot.org/citations/23391734" target="\_blank">23391734</a>, PubMed:<a href="http://www.uniprot.org/citations/23391734" target="\_blank">23391734</a>, PubMed:<a href="http://www.uniprot.org/citations/23391734" target="\_blank">23391734</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

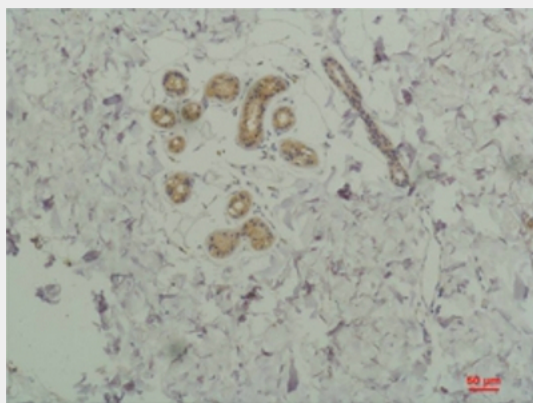
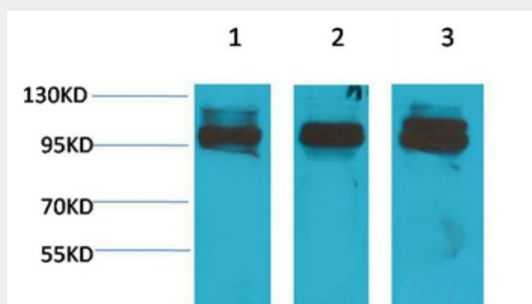
Cytoplasm. Nucleus Note=Translocated into the nucleus upon activation by IFN-alpha/beta

### STAT2 Polyclonal 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 Polyclonal Antibody - Images



### STAT2 Polyclonal Antibody - Background

Signal transducer and activator of transcription that mediates signaling by type I IFNs (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:9020188, PubMed:23391734). 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:26122121).