

Stat2 (phospho Tyr690) Polyclonal Antibody
Catalog # AP67544**Specification****Stat2 (phospho Tyr690) Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	P52630
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal

Stat2 (phospho Tyr690) Polyclonal Antibody - Additional Information**Gene ID** 6773**Other Names**

STAT2; Signal transducer and activator of transcription 2; p113

Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. 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 (phospho Tyr690) 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:23391734, PubMed:9020188). 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:28165510). 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:23391734, PubMed:26122121, PubMed:9020188).

Cellular Location

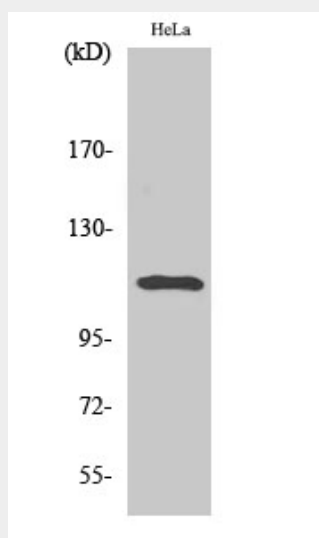
Cytoplasm. Nucleus Note=Translocated into the nucleus upon activation by IFN-alpha/beta

Stat2 (phospho Tyr690) 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 (phospho Tyr690) Polyclonal Antibody - Images



Stat2 (phospho Tyr690) 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 DNMI1L at 'Ser-616' and 'Ser-637' which activate and inactivate the GTPase activity of DNMI1L respectively (PubMed:26122121).