

Stat2 Polyclonal Antibody

Catalog # AP73233

Specification

Stat2 Polyclonal Antibody - Product Information

Application WB, IHC-P Primary Accession P52630

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal

Stat2 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. IHC-p: 1:100-300 ELISA: 1/10000. Not yet tested in other applications. IHC-P~ \sim 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" transcriptions/23391734" transcriptions/23391734" transcriptions/23391734 (See PubMed: 40 href="http://www.uniprot.org/citations/23391734" transcriptions/23391734" transcriptions/23391734 (See PubMed: 40 href="http://www.uniprot.org/citations/23391734")

target="_blank">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 DNM1L at 'Ser-616' and 'Ser-637' which activate and inactivate the GTPase activity of DNM1L respectively (PubMed:<a



 $href="http://www.uniprot.org/citations/23391734" target="_blank">23391734, PubMed:26122121, PubMed:9020188).$

Cellular Location

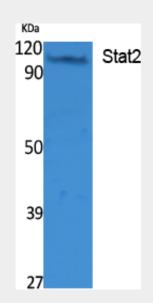
Cytoplasm. Nucleus Note=Translocated into the nucleus upon activation by IFN-alpha/beta

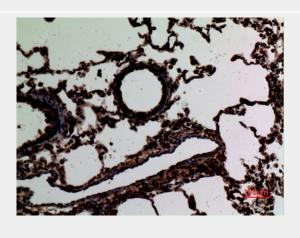
Stat2 Polyclonal Antibody - Protocols

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

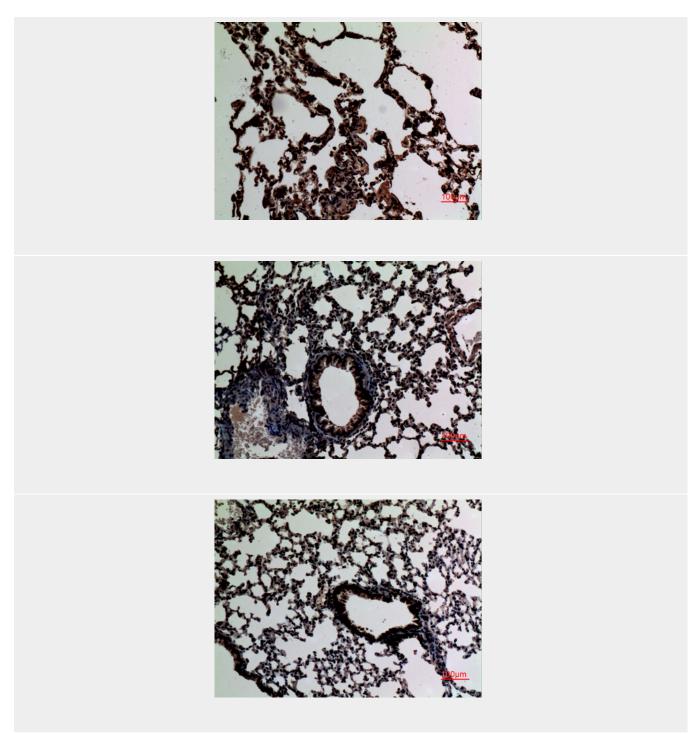
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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).