

STAT2 Antibody

Rabbit mAb Catalog # AP90866

Specification

STAT2 Antibody - Product Information

Application WB, IHC, ICC
Primary Accession P52630
Reactivity Rat

Clonality Monoclonal

Other Names

Homo sapiens interferon alpha induced transcriptional activator; ISGF 3; P113; signal transducer 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

IHC~~1:100~500

ICC~~N/A

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

STAT2

Description STAT2 (113-kDa), originally purified from

the nuclei of alpha-interferon-treated cells, is critical to the transcriptional responses

induced by type I interferons,

IFN-alpha/beta. Stat2 is rapidly activated by phosphorylation at Tyr690 in response to stimulation by IFN-alpha/beta via associations with receptor-bound lak

kinases

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

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"

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:23391734, PubMed:26122121, PubMed:9020188).

Cellular Location

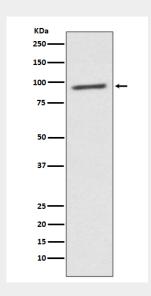
Cytoplasm. Nucleus Note=Translocated into the nucleus upon activation by IFN-alpha/beta

STAT2 Antibody - Protocols

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

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

STAT2 Antibody - Images



Western blot analysis of STAT2 expression in K562 cell lysate.