

STAT2 Antibody (C-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS11831

Specification

STAT2 Antibody (C-Terminus) - Product Information

Application WB, IHC
Primary Accession
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 98kDa KDa

STAT2 Antibody (C-Terminus) - Additional Information

Gene ID 6773

Other Names

Signal transducer and activator of transcription 2, p113, STAT2

Target/Specificity

Peptide mapping to the carboxy terminus of human STAT2

Reconstitution & Storage

+4°C, avoid freezing

Precautions

STAT2 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

STAT2 Antibody (C-Terminus) - 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, has also 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



Tel: 858.875.1900 Fax: 858.875.1999

'Ser-637' which activate and inactivate the GTPase activity of DNM1L respectively (PubMed: 23391734, PubMed:26122121, PubMed:9020188).

Cellular Location

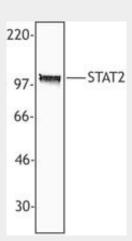
Cytoplasm. Nucleus Note=Translocated into the nucleus upon activation by IFN-alpha/beta

STAT2 Antibody (C-Terminus) - Protocols

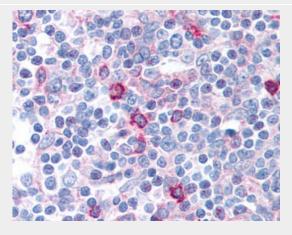
Provided below are standard protocols that you may find useful for product applications.

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

STAT2 Antibody (C-Terminus) - Images



Hela cell extract was resolved by electrophoresis, transferred to nitrocellulose, and probed...



Anti-STAT2 antibody IHC of human tonsil.



STAT2 Antibody (C-Terminus) - 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.

STAT2 Antibody (C-Terminus) - References

Fu X.-Y.,et al.Proc. Natl. Acad. Sci. U.S.A. 89:7840-7843(1992). Yan R.,et al.Nucleic Acids Res. 23:459-463(1995). Ota T.,et al.Nat. Genet. 36:40-45(2004). Scherer S.E.,et al.Nature 440:346-351(2006). Fu X.Y.,et al.Cell 70:323-335(1992).