

Anti-STAT2 Antibody
Catalog # ABO10827**Specification**

Anti-STAT2 Antibody - Product Information

Application	WB
Primary Accession	P52630
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Signal transducer and activator of transcription 2(STAT2) detection. Tested with WB in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-STAT2 Antibody - Additional Information

Gene ID 6773

Other Names

Signal transducer and activator of transcription 2, p113, STAT2

Calculated MW

97916 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

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

Protein Name

Signal transducer and activator of transcription 2

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human STAT2(796-814aa RHLNTEPMEIFRNCVKIEE).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the transcription factor STAT family.

Anti-STAT2 Antibody - Protein Information**Name** STAT2**Function**

Signal transducer and activator of transcription that mediates signaling by type I interferons (IFN- α and IFN- β). 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](http://www.uniprot.org/citations/9020188), PubMed: [23391734](http://www.uniprot.org/citations/23391734)). 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](http://www.uniprot.org/citations/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: [26122121](http://www.uniprot.org/citations/26122121), PubMed: [23391734](http://www.uniprot.org/citations/23391734), PubMed: [9020188](http://www.uniprot.org/citations/9020188)).

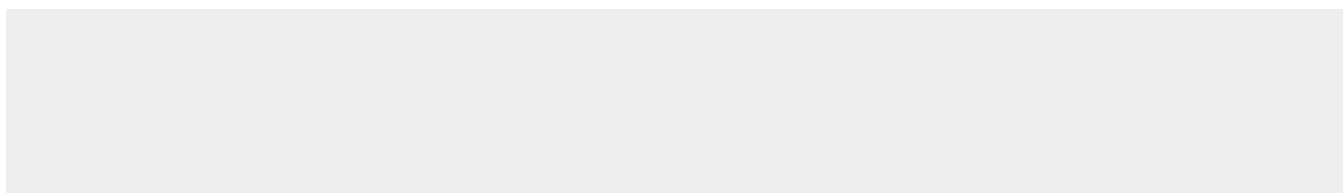
Cellular Location

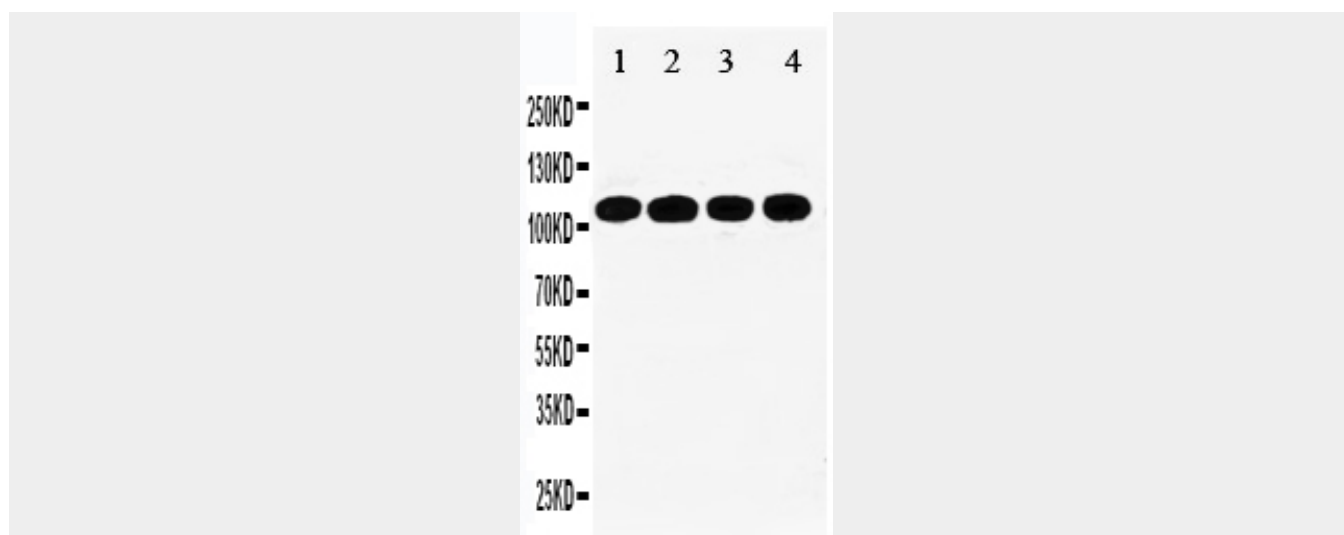
Cytoplasm. Nucleus Note=Translocated into the nucleus upon activation by IFN- α /beta

Anti-STAT2 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](#)

Anti-STAT2 Antibody - Images



Anti-STAT2 antibody, ABO10827, Western blotting
Lane 1: U87 Cell Lysate
Lane 2: U87 Cell Lysate
Lane 3: U87 Cell Lysate
Lane 4: U87 Cell Lysate

Anti-STAT2 Antibody - Background

Signal transducer and activator of transcription 2(STAT2) is a protein that in humans is encoded by the STAT2 gene. The protein encoded by this gene is a member of the STAT protein family. The International Radiation Hybrid Mapping Consortium mapped the STAT2 gene to chromosome 12. STAT2 is a transcription factor critical to the signal transduction pathway of type I interferons. ISGF3(STAT2) assembly involves p48 functioning as an adaptor protein to recruit Stat1 and Stat2 to an IFN-alpha-stimulated response element, Stat2 contributes a potent transactivation domain but is unable to directly contact DNA, while Stat1 stabilizes the heteromeric complex by contacting DNA directly.