

**STAT2 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13749a****Specification**

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**STAT2 Antibody (N-term) - Product Information**

Application	IHC-P, WB,E
Primary Accession	<a href="#">P52630</a>
Other Accession	<a href="#">O02799</a> , <a href="#">NP_005410.1</a> , <a href="#">NP_938146.1</a>
Reactivity	Human
Predicted	Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	97916
Antigen Region	186-215

**STAT2 Antibody (N-term) - Additional Information****Gene ID** 6773**Other Names**

Signal transducer and activator of transcription 2, p113, STAT2

**Target/Specificity**

This STAT2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 186-215 amino acids from the N-terminal region of human STAT2.

**Dilution**

IHC-P~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

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

**STAT2 Antibody (N-term) - 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 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

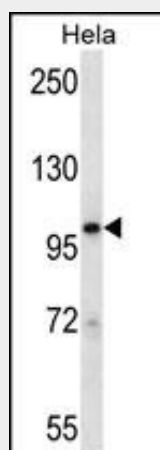
Cytoplasm. Nucleus Note=Translocated into the nucleus upon activation by IFN-alpha/beta

#### STAT2 Antibody (N-term) - Protocols

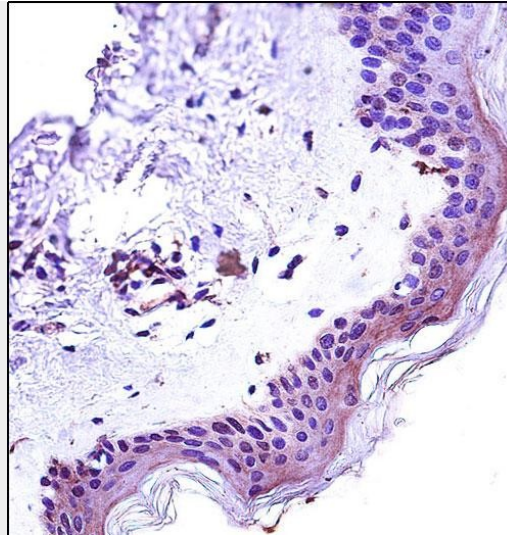
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### STAT2 Antibody (N-term) - Images



STAT2 Antibody (N-term) (Cat. #AP13749a) western blot analysis in HeLa cell line lysates (35ug/lane). This demonstrates the STAT2 antibody detected the STAT2 protein (arrow).



STAT2 Antibody (N-term) (Cat. #AP13749a) immunohistochemistry analysis in formalin fixed and paraffin embedded human skin tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of STAT2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

#### **STAT2 Antibody (N-term) - Background**

The protein encoded by this gene is a member of the STAT protein family. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. In response to interferon (IFN), this protein forms a complex with STAT1 and IFN regulatory factor family protein p48 (ISGF3G), in which this protein acts as a transactivator, but lacks the ability to bind DNA directly. Transcription adaptor P300/CBP (EP300/CREBBP) has been shown to interact specifically with this protein, which is thought to be involved in the process of blocking IFN-alpha response by adenovirus. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq].

#### **STAT2 Antibody (N-term) - References**

Silva, L.K., et al. Eur. J. Hum. Genet. 18(11):1221-1227(2010)  
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)  
Han, S., et al. Hum. Immunol. 71(7):727-730(2010)  
Lou, Y.J., et al. Zhonghua Yi Xue Yi Chuan Xue Za Zhi 27(3):255-258(2010)  
Rosas-Murrieta, N.H., et al. Virol. J. 7, 263 (2010) :