

For Research Use Only

# STAT2 Polyclonal antibody

Catalog Number: 51075-2-AP **6 Publications**



## Basic Information

<b>Catalog Number:</b> 51075-2-AP	<b>GenBank Accession Number:</b> BC051284	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 350 µg/ml by Nanodrop and 227 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 6773	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IHC 1:20-1:200
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P52630	
<b>Isotype:</b> IgG	<b>Full Name:</b> signal transducer and activator of transcription 2, 113kDa	
	<b>Calculated MW:</b> 851 aa, 98 kDa	
	<b>Observed MW:</b> 100-113 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, ELISA	<b>Positive Controls:</b> WB: MCF7 cells, multi-cells
<b>Cited Applications:</b> WB	<b>IHC:</b> human breast cancer tissue, human lung cancer tissue
<b>Species Specificity:</b> human	
<b>Cited Species:</b> human, mouse	

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

STAT2, also named as p113, belongs to the transcription factor STAT family. It is a 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 and associate with ISGF3G/IRF-9 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 IFN stimulated genes, which drive the cell in an antiviral state. It also interacts with CRSP2, CRSP6, Simian virus 5 protein V, rabies virus phosphoprotein, IFNAR1 and IFNAR2. Its interaction with dengue virus NS5 inhibits the phosphorylation of STAT2, and, when all viral proteins are present (polyprotein), STAT2 is targeted for degradation. This antibody is a rabbit polyclonal antibody raised against a peptide mapping within human STAT2. The calculated molecular weight of STAT2 is 98 kDa, but phosphorylated STAT2 is about 100-113 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yan-Ping Xu	31310587	J Clin Invest	
Jiangang Zheng	36572890	BMC Vet Res	WB
Chen Li	36146669	Viruses	WB

## Storage

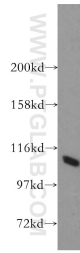
**Storage:**  
Store at -20°C.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

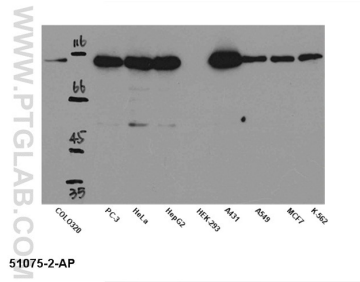
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

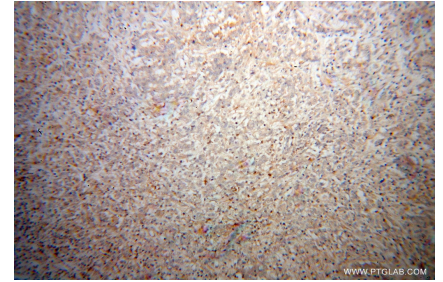
## Selected Validation Data



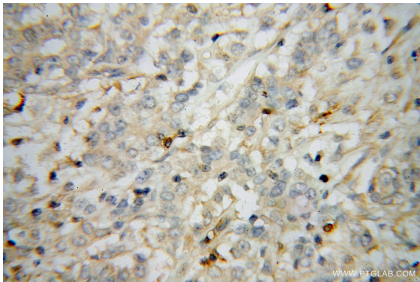
MCF7 cells were subjected to SDS PAGE followed by western blot with 51075-2-AP (STAT2 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



WB result of anti-STAT2 (51075-2-AP) in different cell lysates.



Immunohistochemical analysis of paraffin-embedded human breast cancer using 51075-2-AP (STAT2 antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human breast cancer using 51075-2-AP (STAT2 antibody) at dilution of 1:50 (under 40x lens).