

For Research Use Only

# STAT3 Polyclonal antibody

Catalog Number: 51076-2-AP

7 Publications



## Basic Information

### Catalog Number:

51076-2-AP

### Size:

1000 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

BC000627

### GeneID (NCBI):

6774

### UNIPROT ID:

P40763

### Full Name:

signal transducer and activator of transcription 3 (acute-phase response factor)

### Calculated MW:

770 aa, 88 kDa

### Observed MW:

88 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:12000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IP, ELISA

### Cited Applications:

WB, IP

### Species Specificity:

human, mouse

### Cited Species:

human, mouse

### Positive Controls:

WB : HeLa cells, K-562 cells, NIH/3T3 cells

IP : HeLa cells,

IHC : human cervical cancer tissue, human breast cancer tissue, human lung cancer tissue

**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

Signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3, synonyms: APRF, FLJ20882, MGC16063) 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. STAT3 is activated through phosphorylation in response to various cytokines and growth factors including IFNs, EGF, IL5, IL6, HGF, LIF and BMP2. STAT3 mediates the expression of a variety of genes in response to cell stimuli, and thus plays a key role in many cellular processes such as cell growth and apoptosis. The small GTPase Rac1 has been shown to bind and regulate the activity of STAT3. This antibody is a rabbit polyclonal antibody raised against a peptide mapping within human STAT3. STAT3 exists three isoforms and the molecular weight of each isoform respectively is 83 kDa, 87 kDa and 88 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Chung-I Yu	32222934	Neurotox Res	WB
Yu Sun	32030835	FASEB J	WB
Shengjin Yu	34429775	Oncol Lett	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

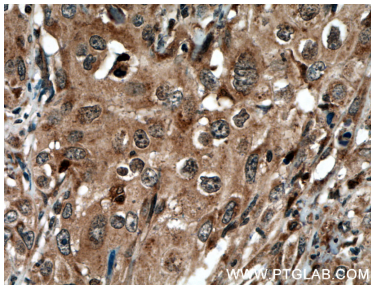
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

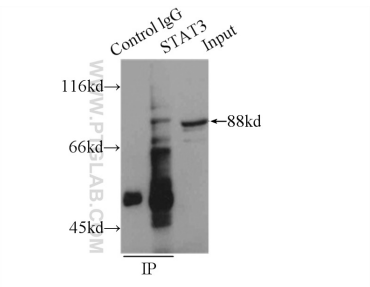
W: [ptgcn.com](http://ptgcn.com)

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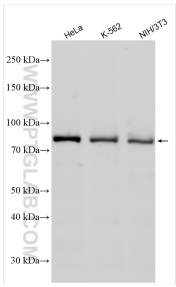
Selected Validation Data



Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 51076-2-AP (STAT3 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-STAT3 (IP:51076-2-AP, 4ug; Detection:51076-2-AP 1:500) with HeLa cells lysate 1500ug.



Various lysates were subjected to SDS PAGE followed by western blot with 51076-2-AP (STAT3 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.