

For Research Use Only

STAT3 Polyclonal antibody

Catalog Number: 51076-2-AP **5 Publications**



Basic Information

Catalog Number: 51076-2-AP	GenBank Accession Number: BC000627	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 6774	Recommended Dilutions: WB 1:500-1:1000 IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB
Source: Rabbit	Full Name: signal transducer and activator of transcription 3 (acute-phase response factor)	IHC 1:50-1:500
Isotype: IgG	Calculated MW: 770 aa, 88 kDa	
	Observed MW: 88 kDa	

Applications

Tested Applications:

IHC, IP, WB, ELISA

Cited Applications:

IP, WB

Species Specificity:

human, mouse

Cited Species:

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

Positive Controls:

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

IP : HeLa cells,

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

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

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

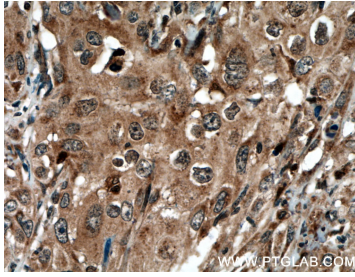
For technical support and original validation data for this product please contact:

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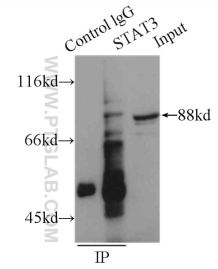
Selected Validation Data



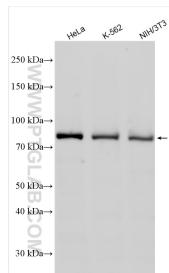
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 51076-2-AP (STAT3 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



K-562 cells were subjected to SDS PAGE followed by western blot with 51076-2-AP (STAT3 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



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.