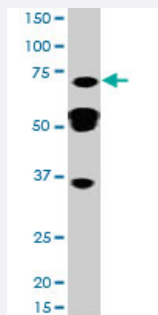


STAT3 (phospho Y705) polyclonal antibody

Catalog # PAB0616

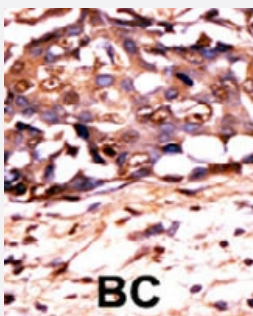
Size 400 uL

Applications



Western Blot (Tissue lysate)

Western blot analysis of STAT3 (phospho Y705) polyclonal antibody (Cat # PAB0616) in mouse liver tissue lysate (35 ug/lane). Phospho-STAT3 (arrow) was detected using the purified polyclonal antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with STAT3 (phospho Y705) polyclonal antibody (Cat # PAB0616) which was peroxidase-conjugated to the secondary antibody followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of STAT3.
Immunogen	Synthetic phosphopeptide (conjugated with KLH) corresponding to residues surrounding Y705 of human STAT3.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein G purification

Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Tissue lysate)

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Gene Info — STAT3

Entrez GeneID	6774
Protein Accession#	NP_644805;P40763
Gene Name	STAT3
Gene Alias	APRF, FLJ20882, HIES, MGC16063
Gene Description	signal transducer and activator of transcription 3 (acute-phase response factor)
Omim ID	102582
Gene Ontology	Hyperlink

Gene Summary

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. This protein is activated through phosphorylation in response to various cytokines and growth factors including IFNs, EGF, IL5, IL6, HGF, LIF and BMP2. This protein 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 this protein. PIAS3 protein is a specific inhibitor of this protein. Three alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq]

Other Designations

DNA-binding protein APRF|acute-phase response factor|signal transducer and activator of transcription 3

Publication Reference

- [Analysis of the activation status of Akt, NFkappaB, and Stat3 in human diffuse gliomas.](#)

Wang H, Wang H, Zhang W, Huang HJ, Liao WS, Fuller GN.

Laboratory Investigation 2004 Aug; 84(8):941.

Application: IHC-P, Human, Brain cortex, Gliomas

- [TEL/ETV6 is a signal transducer and activator of transcription 3 \(Stat3\)-induced repressor of Stat3 activity.](#)

Schick N, Oakeley EJ, Hynes NE, Badache A.

The Journal of Biological Chemistry 2004 Sep; 279(37):38787.

Application: WB, Human, A-375, DU 145, HepG2, LNCaP, MDA-MB-468, PC-3, SKBr3, T47D cells

- [Proteolytic conversion of STAT3alpha to STAT3gamma in human neutrophils: role of granule-derived serine proteases.](#)

Kato T, Sakamoto E, Kutsuna H, Kimura-Eto A, Hato F, Kitagawa S.

The Journal of Biological Chemistry 2004 Jul; 279(30):31076.

Pathway

- [Acute myeloid leukemia](#)
- [Adipocytokine signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Jak-STAT signaling pathway](#)
- [Pancreatic cancer](#)

- [Pathways in cancer](#)

Disease

- [Abortion](#)
- [Asthma](#)
- [Autoimmune Diseases](#)
- [Birth Weight](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchiolitis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colitis](#)
- [Crohn Disease](#)
- [Depressive Disorder](#)
- [Dermatitis](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [DNA Damage](#)
- [Eczema](#)
- [Edema](#)
- [Fatty Liver](#)
- [Genetic Predisposition to Disease](#)

- [Genomic Instability](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Hepatitis C](#)
- [Infant](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Insulin Resistance](#)
- [Kidney Neoplasms](#)
- [Leukemia](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Multiple Sclerosis](#)
- [Neoplasm Metastasis](#)
- [Obesity](#)
- [Ovarian Neoplasms](#)
- [Pulmonary Disease](#)
- [Rectal Fistula](#)
- [Respiratory Syncytial Virus Infections](#)
- [Spondylitis](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Tooth Abnormalities](#)