

Datasheet for ABIN969421

anti-STAT3 antibody**3** Images**1** Publication[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	STAT3
Reactivity:	Human, Mouse, Monkey
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This STAT3 antibody is un-conjugated
Application:	Immunohistochemistry (IHC), ELISA, Immunocytochemistry (ICC)

Product Details

Purpose:	STAT3 Antibody
Immunogen:	Purified recombinant fragment of human STAT3 expressed in E. Coli.
Clone:	3B5
Isotype:	IgG1
Purification:	Ascitic fluid

Target Details

Target:	STAT3
Alternative Name:	STAT3 (STAT3 Products)
Background:	The Stat3 transcription factor is an important signaling molecule for many cytokines and growth-factor receptors and is required for murine fetal development . Stat3 is constitutively

Target Details

activated in a number of human tumors and possesses oncogenic potential and anti-apoptotic activities. Stat3 is activated by phosphorylation at Tyr705, which induces dimerization, nuclear translocation and DNA binding. Transcriptional activation seems to be regulated by phosphorylation at Ser727 through the MAPK or mTOR pathways. Stat3 isoform expression appears to reflect biological function as the relative expression levels of Stat3a (86 kDa) and Stat3

Molecular Weight: 88 kDa

Gene ID: 6774

UniProt: [P40763](#)

Pathways: [JAK-STAT Signaling](#), [RTK Signaling](#), [Interferon-gamma Pathway](#), [Neurotrophin Signaling Pathway](#), [Dopaminergic Neurogenesis](#), [Response to Growth Hormone Stimulus](#), [Carbohydrate Homeostasis](#), [Stem Cell Maintenance](#), [Hepatitis C](#), [Protein targeting to Nucleus](#), [Feeding Behaviour](#), [CXCR4-mediated Signaling Events](#), [Signaling of Hepatocyte Growth Factor Receptor](#)

Application Details

Application Notes: ELISA: 1/10000
ICC: 1/200 - 1/1000

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Ascitic fluid containing 0.03 % sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

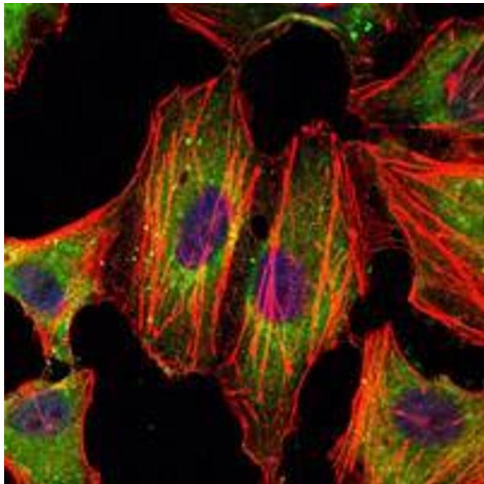
Storage: 4 °C, -20 °C

Storage Comment: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Publications

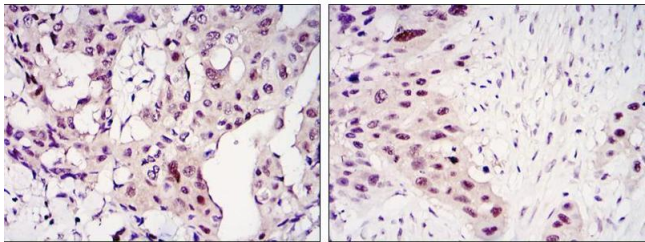
Product cited in: Lin, Buettner, Yuan, Yip, Horne, Jove, Vaidehi: "Molecular dynamics simulations of the conformational changes in signal transducers and activators of transcription, Stat1 and Stat3."

Images



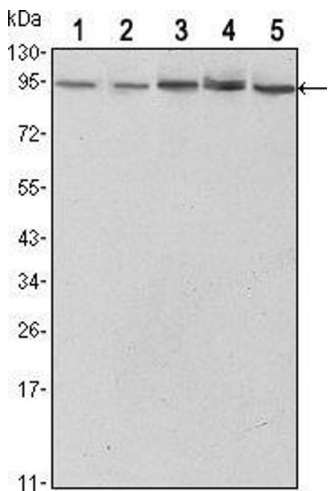
Immunofluorescence

Image 1. Immunofluorescence analysis of HeLa cells using STAT3 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Immunohistochemistry

Image 2. Immunohistochemical analysis of paraffin-embedded mammary cancer tissues (left) and lung cancer tissues (right) using STAT3 mouse mAb with DAB staining.



Western Blotting

Image 3. Western blot analysis using STAT3 mouse mAb against HeLa (1), NIH/3T3 (2), Jurkat (3), PC-12 (4) and COS7 (5) cell lysate.