

Datasheet for ABIN7127754

Recombinant anti-STAT3 antibody (pSer727)[Go to Product page](#)**3** Images

Overview

Quantity:	100 µL
Target:	STAT3
Binding Specificity:	pSer727
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This STAT3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunoprecipitation (IP)

Product Details

Immunogen:	A synthesized peptide derived from human Phospho-STAT3 (S727)
Clone:	2A9
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Affinity-chromatography

Target Details

Target:	STAT3
Alternative Name:	STAT3 (STAT3 Products)

Target Details

Background:	Background: Signal transducer and transcription activator that mediates cellular responses to interleukins, KITLG/SCF, LEP and other growth factors (PubMed:10688651, PubMed:12359225, PubMed:12873986, PubMed:15194700, PubMed:17344214, PubMed:18242580, PubMed:23084476). Once activated, recruits coactivators, such as NCOA1 or MED1, to the promoter region of the target gene (PubMed:17344214). May mediate cellular responses to activated FGFR1, FGFR2, FGFR3 and FGFR4 (PubMed:12873986). Binds to the interleukin-6 (IL-6)-responsive elements identified in the promoters of various acute-phase protein genes (PubMed:12359225). Activated by IL31 through IL31RA (PubMed:15194700). Acts as a regulator of inflammatory response by regulating differentiation of naive CD4(+) T-cells into T-helper Th17 or regulatory T-cells (Treg): deacetylation and oxidation of lysine residues by LOXL3, leads to disrupt STAT3 dimerization and inhibit its transcription activity (PubMed:28065600). Involved in cell cycle regulation by inducing the expression of key genes for the progression from G1 to S phase, such as CCND1 (PubMed:17344214). Mediates the effects of LEP on melanocortin production, body energy homeostasis and lactation (By similarity). May play an apoptotic role by transactivating BIRC5 expression under LEP activation (PubMed:18242580). Cytoplasmic STAT3 represses macroautophagy by inhibiting EIF2AK2/PKR activity (PubMed:23084476). Plays a crucial role in basal beta cell functions, such as regulation of insulin secretion (By similarity). Aliases: Signal transducer and activator of transcription 3, Acute-phase response factor, STAT3
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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:	Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IP:1:200-1:1000,
Restrictions:	For Research Use only

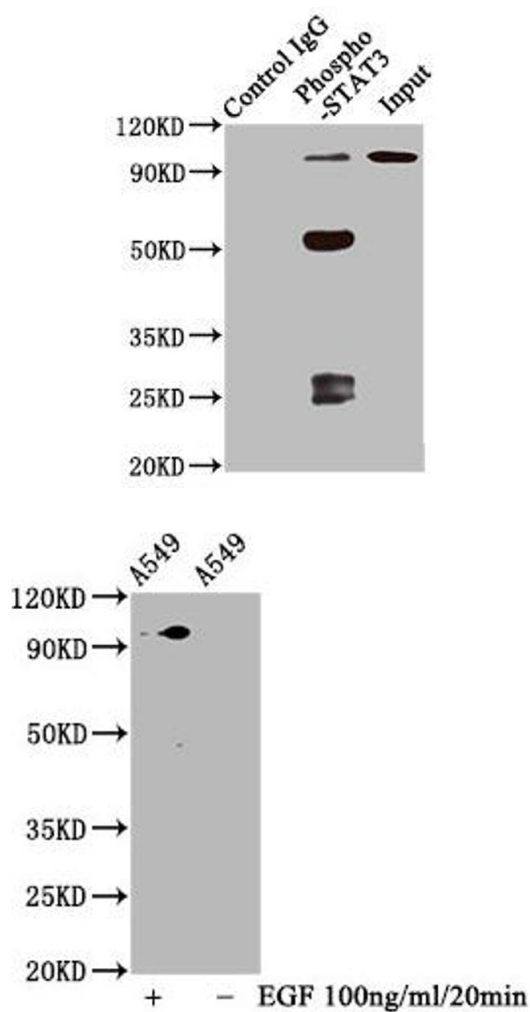
Handling

Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.

Handling

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:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images

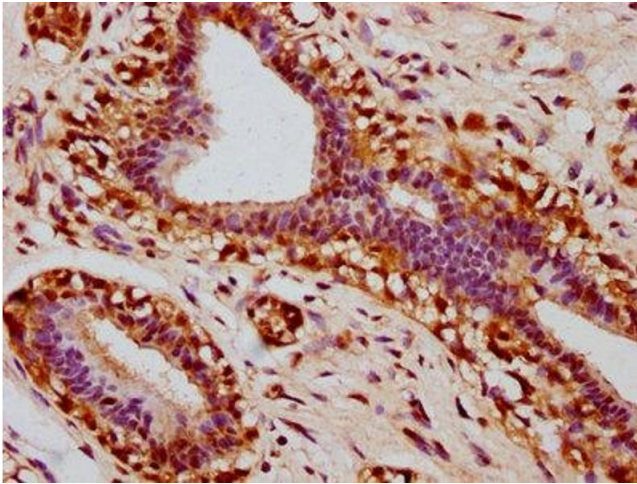


Western Blotting

Image 1. Immunoprecipitating Phospho-STAT3 in 293 whole cell lysate treated with Calyculin A Lane 1: Rabbit control IgG(1 µg)instead of ABIN7127754 in 293 whole cell lysate treated with Calyculin A. For western blotting,a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000) Lane 2: ABIN7127754(3 µg)+ 293 whole cell lysate treated with Calyculin A(1 mg) Lane 3: 293 whole cell lysate treated with Calyculin A (20 µg)

Western Blotting

Image 2. Western Blot Positive WB detected in A549 whole cell lysate(treated with EGF or not) All lanes Phospho-STAT3 antibody at 1.88 µg/mL Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 98 KDa Observed band size: 98 KDa



Immunohistochemistry

Image 3. IHC image of ABIN7127754 diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.