

Datasheet for ABIN6148567
anti-STAT3 antibody (AA 40-240)



[Go to Product page](#)

2 Images

Overview

Quantity:	100 µL
Target:	STAT3
Binding Specificity:	AA 40-240
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This STAT3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 40-240 of human STAT3 (NP_644805.1).
Sequence:	SQDWAYAASK ESHATLVFHN LLGEIDQQYS RFLQESNVLY QHNLRRIKQF LQSRYLEKPM EIARIVARCL WEESRLLQTA ATAAQQGGQA NHPTAAVVTE KQQMLEQHLQ DVRKRVQDLE QKMKVVENLQ DDFDFNYKTL KSQGDMQDLN GNNQSVTRQK MQQLEQMLTA LDQMRRSIVS ELAGLLSAME YVQKTLTDEE L
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Polyclonal Antibodies

Target Details

Target:	STAT3
Alternative Name:	STAT3 (STAT3 Products)
Background:	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. Mutations in this gene are associated with infantile-onset multisystem autoimmune disease and hyper-immunoglobulin E syndrome. Alternative splicing results in multiple transcript variants encoding distinct isoforms.,ADMIO,ADMIO1,APRF,HIES,STAT3,Stat3,Epigenetics & Nuclear Signaling,Transcription Factors,Cancer,Signal Transduction,ErbB-HER Signaling Pathway,MAPK-Erk Signaling Pathway,MAPK-JNK Signaling Pathway,Cell Biology & Developmental Biology,Apoptosis,Inhibition of Apoptosis,Microtubules,Immunology & Inflammation,IL-6 Receptor Signaling Pathway,Stem Cells,Embryonic Stem Cells,Cardiovascular,Heart,Cardiogenesis,Hypertrophy,STAT3
Molecular Weight:	83 kDa/87 kDa/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

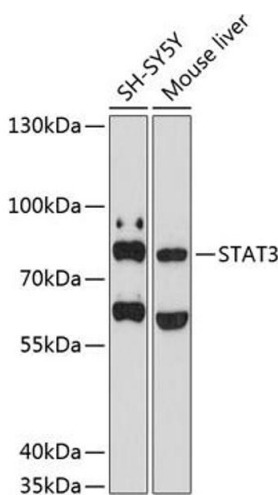
Application Details

Application Notes:	WB,1:500 - 1:2000,IF,1:50 - 1:200
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
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
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.

Images

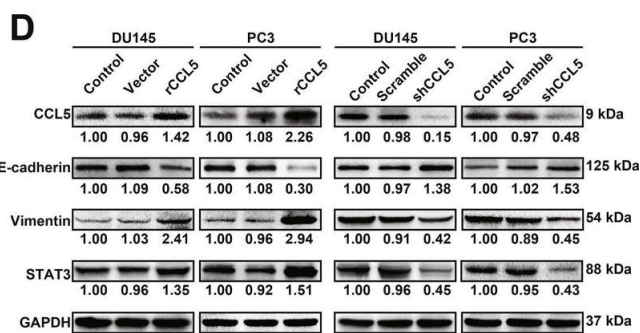


Western Blotting

Image 1. Western blot analysis of extracts of various cell lines, using ST antibody (ABIN6132552, ABIN6148567, ABIN6148570 and ABIN6215114) at 1:1000 dilution.Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution.Lysates/proteins: 25 µg per lane.Blocking buffer: 3 % nonfat dry milk in TBST.Detection: ECL Basic Kit (RM00020).Exposure time: 90s.

Western Blotting

Image 2. STAT3 is identified as the primary gene responsive for CCL5 stimulation on prostate cancer cells.a The mRNA expression differences of a panel of metastasis and stemness-related genes in both DU145 and PC3 cells after 40 ng/mL CCL5 treatment were determined by QPCR method. b, c CCL5 could significantly promote STAT3 expression, phosphorylation as well as its nuclear translocation in both DU145 and PC3 cells. Scale bar, 10 µ m. d CCL5 overexpression significantly activated STAT3 signaling and induced EMT in DU145 and PC3 cells, while CCL5 knockdown achieved the opposite effects. e-g CCL5 treatment alone significantly activated STAT3 signaling and promoted the self-renewal efficacy of PCSCs, while



cryptotanshinone (CTS), the specific inhibitor of STAT3, partly abrogated that. Scale bar, 100 μ m. All data represent the means $\pm$ SD. n=3, *p<0.05, **p<0.01. - figure provided by CiteAb. Source: PMID32300100