

Anti-STAT3 antibody ab31370

★★★★★ [3 Abreviews](#) [17 References](#) [5 图像](#)

概述

产品名称	Anti-STAT3抗体
描述	兔多克隆抗体to STAT3
宿主	Rabbit
特异性	ab31370 detects endogenous levels of STAT3 protein around Tyrosine 705.
经测试应用	适用于: ELISA, WB, IHC-P
种属反应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide corresponding to Human STAT3. Immunogen range is from aa 672-721. Synthetic non-phosphopeptide derived from human STAT3 around the phosphorylation site of Tyrosine 705. Database link: P40763
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride
纯度	Without Mg ²⁺ and Ca ²⁺ Immunogen affinity purified
纯化说明	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
克隆	多克隆

同种型

IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab31370于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

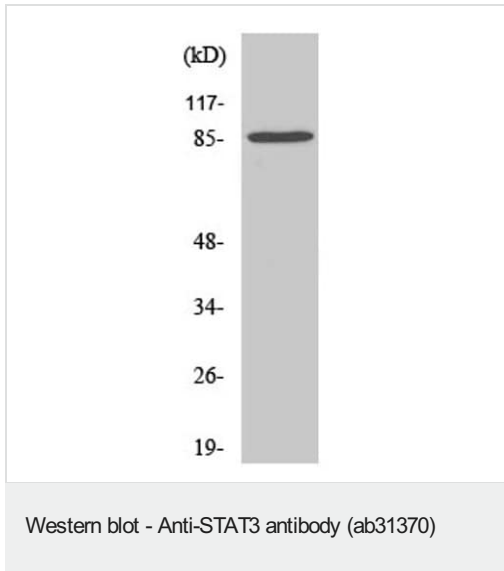
应用	Ab评论	说明
ELISA		Use at an assay dependent concentration.
WB	★★★★★ (2)	1/500 - 1/1000. Detects a band of approximately 95 kDa (predicted molecular weight: 88 kDa).
IHC-P		1/50 - 1/100.

靶标

功能	Signal transducer and transcription activator that mediates cellular responses to interleukins, KITLG/SCF, LEP and other growth factors. 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. Binds to the interleukin-6 (IL-6)-responsive elements identified in the promoters of various acute-phase protein genes. Activated by IL31 through IL31RA. 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.
组织特异性	Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.
疾病相关	Hyperimmunoglobulin E recurrent infection syndrome, autosomal dominant Autoimmune disease, multisystem, infantile-onset
序列相似性	Belongs to the transcription factor STAT family. Contains 1 SH2 domain.
翻译后修饰	Tyrosine phosphorylated upon stimulation with EGF. Tyrosine phosphorylated in response to constitutively activated FGFR1, FGFR2, FGFR3 and FGFR4 (By similarity). Activated through tyrosine phosphorylation by BMX. Tyrosine phosphorylated in response to IL6, IL11, LIF, CNTF, KITLG/SCF, CSF1, EGF, PDGF, IFN-alpha, LEP and OSM. Activated KIT promotes phosphorylation on tyrosine residues and subsequent translocation to the nucleus. Phosphorylated on serine upon DNA damage, probably by ATM or ATR. Serine phosphorylation is important for the formation of stable DNA-binding STAT3 homodimers and maximal transcriptional activity. ARL2BP may participate in keeping the phosphorylated state of STAT3 within the nucleus. Upon LPS challenge, phosphorylated within the nucleus by IRAK1. Upon erythropoietin treatment, phosphorylated on Ser-727 by RPS6KA5. Phosphorylation at Tyr-705 by PTK6 or FER leads to an increase of its transcriptional activity. Dephosphorylation on tyrosine residues by PTPN2 negatively regulates IL6/interleukin-6 signaling.
细胞定位	Cytoplasm. Nucleus. Shuttles between the nucleus and the cytoplasm. Translocated into the nucleus upon tyrosine phosphorylation and dimerization, in response to signaling by activated

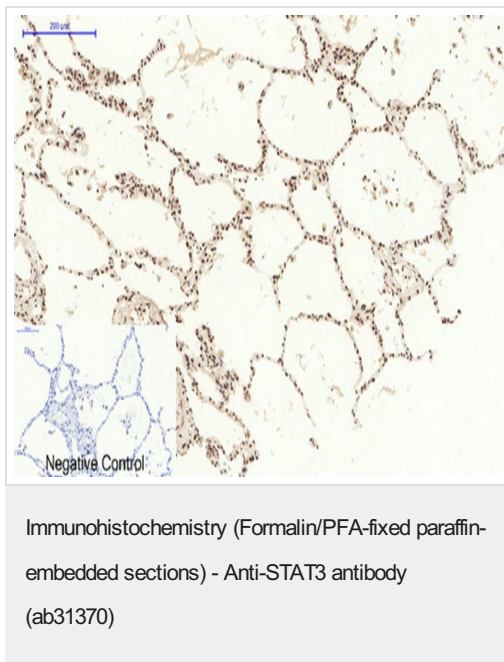
FGFR1, FGFR2, FGFR3 or FGFR4. Constitutive nuclear presence is independent of tyrosine phosphorylation. Predominantly present in the cytoplasm without stimuli. Upon leukemia inhibitory factor (LIF) stimulation, accumulates in the nucleus. The complex composed of BART and ARL2 plays an important role in the nuclear translocation and retention of STAT3. Identified in a complex with LYN and PAG1.

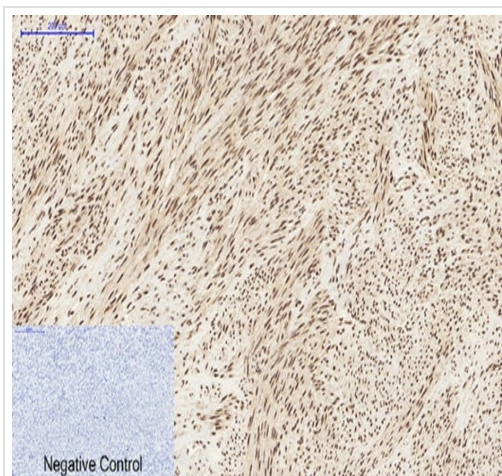
图片



Anti-STAT3 antibody (ab31370) at 1/2000 dilution + HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Predicted band size: 88 kDa

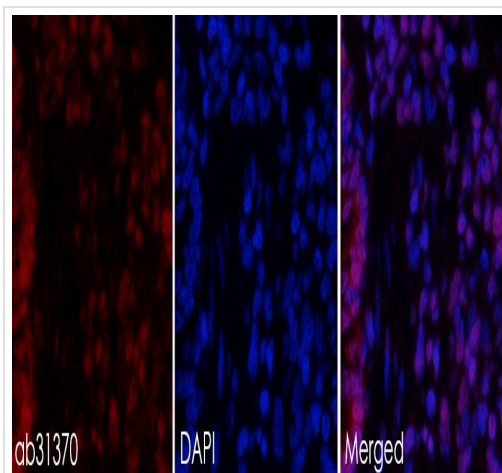




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-STAT3 antibody (ab31370)

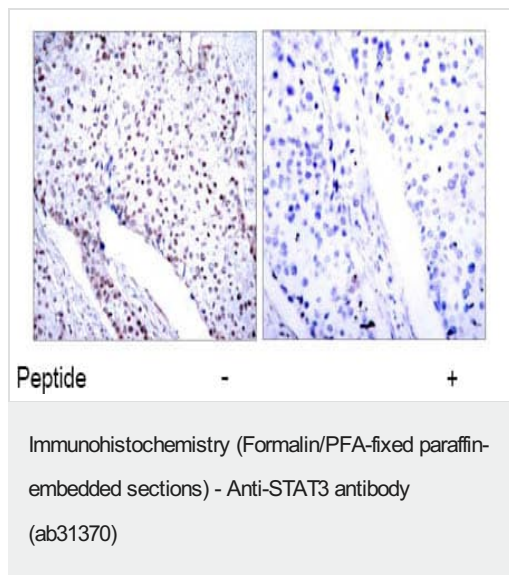
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human uterus tissue labelling STAT3 with ab31370 at 1/200 dilution. Primary incubated overnight at 4°C.

Negative control: Secondary antibody only.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-STAT3 antibody (ab31370)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat lung tissue labelling STAT3 with ab31370 at 1/200 dilution (red). Primary incubated overnight at 4°C. Nuclear DNA was labelled with DAPI (blue).



Immunohistochemical analysis of paraffin-embedded breast carcinoma. Left: Using anti-STAT3 antibody(ab31370, diluted 1:100); Right: The same antibody preincubated with synthesized peptide.

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