

# Anti-STAT1 antibody [OTI9B12] ab125685

## 2 图像

### 概述

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<b>产品名称</b>	Anti-STAT1抗体[OTI9B12]
<b>描述</b>	小鼠单克隆抗体[OTI9B12] to STAT1
<b>宿主</b>	Mouse
<b>经测试应用</b>	<b>适用于:</b> WB
<b>种属反应性</b>	<b>与反应:</b> Rat, Dog, Human, African green monkey
<b>免疫原</b>	Recombinant full length protein corresponding to Human STAT1. Database link: <a href="#">NP_009330</a>
<b>阳性对照</b>	WB: STAT1-transfected HEK293T cell lysate; HeLa, HT29, A549, COS7, MDCK, and MCF7 cell extracts.
<b>常规说明</b>	<p>The clone number has been updated from 9B12 to OTI9B12, both clone numbers name the same antibody clone.</p> <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&amp;As</p>

### 性能

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<b>形式</b>	Liquid
<b>存放说明</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
<b>存储溶液</b>	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 1% BSA, 50% Glycerol, PBS
<b>纯度</b>	Affinity purified
<b>纯化说明</b>	Purified from cell culture supernatant by affinity chromatography
<b>克隆</b>	单克隆
<b>克隆编号</b>	OTI9B12

同种型

IgG1

## 应用

### The Abpromise guarantee

**Abpromise™**承诺保证使用ab125685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
WB		1/1000 - 1/2000. Predicted molecular weight: 87 kDa.

## 靶标

### 功能

Signal transducer and activator of transcription that mediates signaling by interferons (IFNs). Following type I IFN (IFN-alpha and IFN-beta) binding to cell surface receptors, Jak kinases (TYK2 and JAK1) are activated, leading to tyrosine phosphorylation of STAT1 and STAT2. The phosphorylated STATs dimerize, associate with ISGF3G/IRF-9 to form a complex termed ISGF3 transcription factor, that enters the nucleus. ISGF3 binds to the IFN stimulated response element (ISRE) to activate the transcription of interferon stimulated genes, which drive the cell in an antiviral state. In response to type II IFN (IFN-gamma), STAT1 is tyrosine- and serine-phosphorylated. It then forms a homodimer termed IFN-gamma-activated factor (GAF), migrates into the nucleus and binds to the IFN gamma activated sequence (GAS) to drive the expression of the target genes, inducing a cellular antiviral state.

### 疾病相关

Note=STAT1 deficiency results in impaired immune response leading to severe mycobacterial and viral diseases. In the case of complete deficiency, patients can die of viral disease. Defects in STAT1 are a cause of mendelian susceptibility to mycobacterial disease (MSMD) [MIM:209950]; also known as familial disseminated atypical mycobacterial infection. This rare condition confers predisposition to illness caused by moderately virulent mycobacterial species, such as Bacillus Calmette-Guerin (BCG) vaccine and environmental non-tuberculous mycobacteria, and by the more virulent Mycobacterium tuberculosis. Other microorganisms rarely cause severe clinical disease in individuals with susceptibility to mycobacterial infections, with the exception of Salmonella which infects less than 50% of these individuals. The pathogenic mechanism underlying MSMD is the impairment of interferon-gamma mediated immunity whose severity determines the clinical outcome. Some patients die of overwhelming mycobacterial disease with lepromatous-like lesions in early childhood, whereas others develop, later in life, disseminated but curable infections with tuberculoid granulomas. MSMD is a genetically heterogeneous disease with autosomal recessive, autosomal dominant or X-linked inheritance.

### 序列相似性

Belongs to the transcription factor STAT family.  
Contains 1 SH2 domain.

### 翻译后修饰

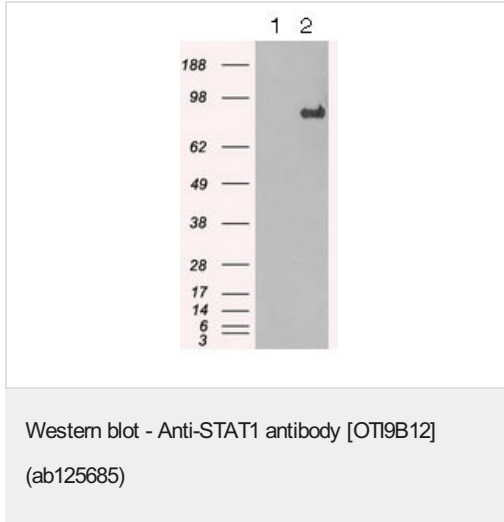
Phosphorylated on tyrosine and serine residues in response to IFN-alpha, IFN-gamma, PDGF and EGF. Phosphorylation on Tyr-701 (lacking in beta form) by JAK promotes dimerization and subsequent translocation to the nucleus. Phosphorylation on Ser-727 by several kinases including MAPK14, ERK1/2 and CAMKII on IFN-gamma stimulation, regulates STAT1 transcriptional activity. Phosphorylation on Ser-727 promotes sumoylation though increasing interaction with PIAS. Phosphorylation on Ser-727 by PKCdelta induces apoptosis in response to DNA-damaging agents.  
Sumoylated by SUMO1, SUMO2 and SUMO3. Sumoylation is enhanced by IFN-gamma-induced phosphorylation on Ser-727, and by interaction with PIAS proteins. Enhances the transactivation

activity.  
ISGylated.

## 细胞定位

Cytoplasm. Nucleus. Translocated into the nucleus in response to IFN-gamma-induced tyrosine phosphorylation and dimerization.

## 图片



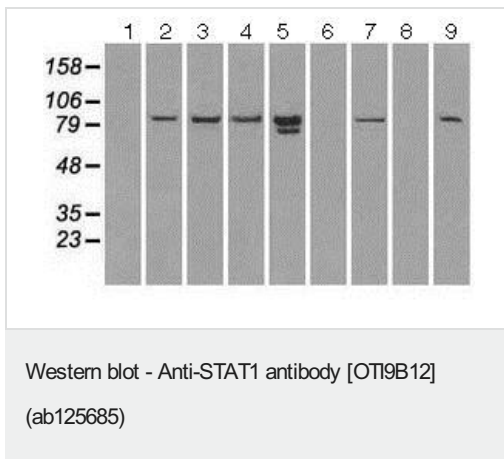
**All lanes :** Anti-STAT1 antibody [OTI9B12] (ab125685) at 1/1000 dilution

**Lane 1 :** HEK293T cell lysate transfected with pCMV6-ENTRY control cDNA

**Lane 2 :** HEK293T cell lysate transfected with pCMV6-ENTRY STAT1 cDNA

Lysates/proteins at 5 µg per lane.

**Predicted band size:** 87 kDa



**All lanes :** Anti-STAT1 antibody [OTI9B12] (ab125685) at 1/1000 dilution

**Lane 1 :** HepG2 cell extract

**Lane 2 :** HeLa cell extract

**Lane 3 :** HT29 cell extract

**Lane 4 :** A549 cell extract

**Lane 5 :** COS7 cell extract

**Lane 6 :** Jurkat cell extract

**Lane 7 :** MDCK cell extract

**Lane 8 :** PC12 cell extract

**Lane 9 :** MCF7 cell extract

Lysates/proteins at 35 µg per lane.

**Predicted band size:** 87 kDa

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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