

Anti-STAT1 antibody [OTI9B12] ab125685

画像数 2

製品の概要

| | |
|--------------|---|
| 製品名 | Anti-STAT1 antibody [OTI9B12] |
| 製品の詳細 | Mouse monoclonal [OTI9B12] to STAT1 |
| 由来種 | Mouse |
| アプリケーション | 適用あり: WB |
| 種交差性 | 交差種: Rat, Dog, Human, African green monkey |
| 免疫原 | Recombinant full length protein corresponding to Human STAT1. Database link: NP_009330 |
| ポジティブ・コントロール | WB: STAT1-transfected HEK293T cell lysate; HeLa, HT29, A549, COS7, MDCK, and MCF7 cell extracts. |
| 特記事項 | <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&As</p> |

製品の特性

| | |
|----------|--|
| 製品の状態 | Liquid |
| 保存方法 | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles. |
| バッファー | pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 1% BSA, 50% Glycerol, PBS |
| 精製度 | Affinity purified |
| 特記事項(精製) | Purified from cell culture supernatant by affinity chromatography |
| ポリ/モノ | モノクローナル |
| クローン名 | OTI9B12 |

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab125685の使用に適用されます**
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご確認ください。

| アプリケーション | Abreviews | 特記事項 |
|----------|-----------|--|
| WB | | 1/1000 - 1/2000. Predicted molecular weight: 87 kDa. |

ターゲット情報

機能

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.

関連疾患

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.

配列類似性

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

翻訳後修飾

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.

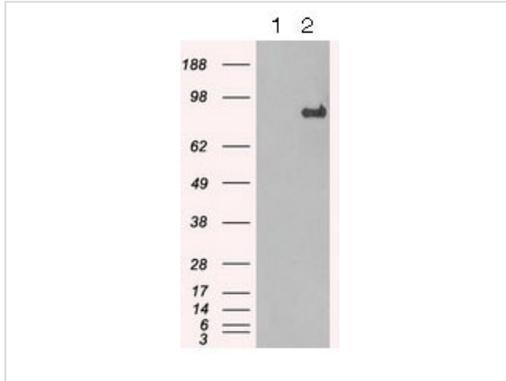
Sumoylated by SUMO1, SUMO2 and SUMO3. Sumoylation is enhanced by IFN-gamma-induced phosphorylation on Ser-727, and by interaction with PIAS proteins. Enhances the transactivation

activity.
ISGylated.

細胞内局在

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

画像



Western blot - Anti-STAT1 antibody [OTI9B12]
(ab125685)

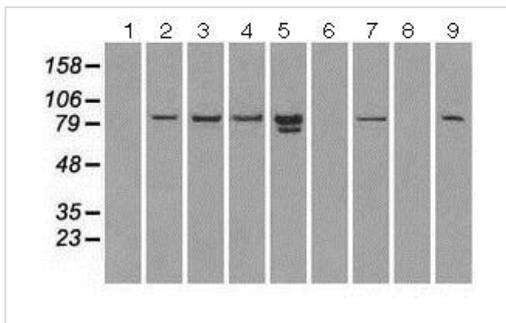
All lanes : Anti-STAT1 antibody [OTI9B12] (ab125685) at 1/1000 dilution

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



Western blot - Anti-STAT1 antibody [OTI9B12]
(ab125685)

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

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