abcam

Product datasheet

Alexa Fluor® 488 Anti-JAK2 (phospho Y1007 + Y1008) antibody [E132] ab200339



重组 RabMAb

3 图像

概述

产品名称 Alexa Fluor® 488荧光Anti-JAK2 (phospho Y1007 + Y1008)抗体[E132]

描述 Alexa Fluor® 488荧光兔单克隆抗体[E132] to JAK2 (phospho Y1007 + Y1008)

宿主 Rabbit

偶联物 Alexa Fluor® 488. Ex: 495nm, Em: 519nm

特异性 Stimulation may be required to allow detection of the phosphorylated protein. Please see images

below for recommended treatment conditions and positive controls.

经测试应用 适用于: Flow Cyt (Intra), ICC/IF

种属反应性 与反应: Human

预测可用于: Mouse, Rat 🔷

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 ICC/IF: Jurkat cells, starved of serum for 16 hours then treated with 1mM Pervanadate for 30mins

at 37°C. Flow Cyt (intra): Jurkat starved of serum for 16 hours then treated with 1mM

Pervanadate for 30mins

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit 常规说明

monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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outlicensing@thermofisher.com.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA

纯**度** Protein A purified

 克隆
 单克隆

 克隆编号
 E132

 同种型
 IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab200339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
Flow Cyt (Intra)		1/50.
ICC/IF		1/100.

靶标

功能

Non-receptor tyrosine kinase involved in various processes such as cell cycle progression, apoptosis, mitotic recombination, genetic instability and histone modifications. In the cytoplasm, plays a pivotal role in signal transduction via its association with cytokine receptors, which constitutes an initiating step in signaling for many members of the cytokine receptor superfamily including the receptors for growth hormone (GHR), prolactin (PRLR), leptin (LEPR), erythropoietin (EPOR), granulocyte-macrophage colony-stimulating factor (CSF2), thrombopoietin (THPO) and multiple interleukins. Following stimulation with erythropoietin (EPO) during erythropoiesis, it is autophosphorylated and activated, leading to its association with erythropoietin receptor (EPOR) and tyrosine phosphorylation of residues in the EPOR cytoplasmic domain. Also involved in promoting the localization of EPOR to the plasma membrane. Also acts downstream of some G-protein coupled receptors. Plays a role in the control of body weight (By similarity). Mediates angiotensin-2-induced ARHGEF1 phosphorylation. In the nucleus, plays a key role in chromatin by specifically mediating phosphorylation of 'Tyr-41' of histone H3 (H3Y41ph), a specific tag that promotes exclusion of CBX5 (HP1 alpha) from chromatin.

组织特异性

疾病相关

Expressed in blood, bone marrow and lymph node.

Note=Chromosomal aberrations involving JAK2 are found in both chronic and acute forms of eosinophilic, lymphoblastic and myeloid leukemia. Translocation t(8;9)(p22;p24) with PCM1 links the protein kinase domain of JAK2 to the major portion of PCM1. Translocation t(9;12)(p24;p13) with ETV6.

Defects in JAK2 are a cause of susceptibility to Budd-Chiari syndrome (BCS) [MIM:600880]. It is a syndrome caused by obstruction of hepatic venous outflow involving either the hepatic veins or

the terminal segment of the inferior vena cava. Obstructions are generally caused by thrombosis and lead to hepatic congestion and ischemic necrosis. Clinical manifestations observed in the majority of patients include hepatomegaly, right upper quadrant pain and abdominal ascites. Budd-Chiari syndrome is associated with a combination of disease states including primary myeloproliferative syndromes and thrombophilia due to factor V Leiden, protein C deficiency and antithrombin III deficiency. Budd-Chiari syndrome is a rare but typical complication in patients with polycythemia vera.

Defects in JAK2 are a cause of polycythemia vera (PV) [MIM:263300]. A myeloproliferative disorder characterized by abnormal proliferation of all hematopoietic bone marrow elements, erythroid hyperplasia, an absolute increase in total blood volume, but also by myeloid leukocytosis, thrombocytosis and splenomegaly.

Defects in JAK2 gene may be a cause of essential thrombocythemia (ET) [MIM:187950]. ET is characterized by elevated platelet levels due to sustained proliferation of megakaryocytes, and frequently lead to thrombotic and haemorrhagic complications.

Defects in JAK2 are a cause of myelofibrosis (MYELOF) [MIM:254450]. Myelofibrosis is a disorder characterized by replacement of the bone marrow by fibrous tissue, occurring in association with a myeloproliferative disorder. Clinical manifestations may include anemia, pallor, splenomegaly, hypermetabolic state, petechiae, ecchymosis, bleeding, lymphadenopathy, hepatomegaly, portal hypertension.

Defects in JAK2 are a cause of acute myelogenous leukemia (AML) [MIM:601626]. AML is a malignant disease in which hematopoietic precursors are arrested in an early stage of development.

Belongs to the protein kinase superfamily. Tyr protein kinase family. JAK subfamily.

Contains 1 FERM domain.

Contains 1 protein kinase domain.

Contains 1 SH2 domain.

Possesses 2 protein kinase domains. The second one probably contains the catalytic domain,

while the presence of slight differences suggest a different role for protein kinase 1.

翻译后修饰 Autophosphorylated, leading to regulate its activity. Leptin promotes phosphorylation on tyrosine

residues, including phosphorylation on Tyr-813. Autophosphorylation on Tyr-119 in response to EPO down-regulates its kinase activity. Autophosphorylation on Tyr-868, Tyr-966 and Tyr-972 in

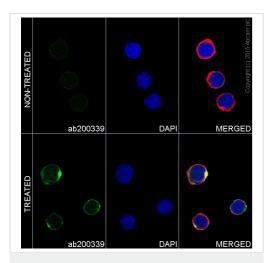
response to growth hormone (GH) are required for maximal kinase activity.

细胞定位 Endomembrane system. Nucleus.

图片

序列相似性

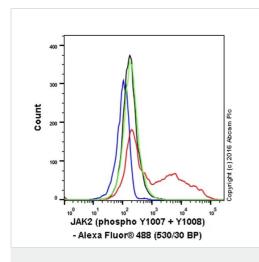
结构域



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-JAK2 (phospho Y1007 + Y1008) antibody [E132] (ab200339)

ab200339 staining JAK2 (phospho Y1007 + Y1008) in Jurkat cells, starved of serum for 16 hours then treated with 1mM Pervanadate for 30mins at 37°C (Treated) or solvent-only for control purposes (Non-treated). The cells were fixed with 4% formaldehyde (10 min) permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 10% normal goat serum in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab200339 at 1/100 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor[®] 594) at 1/200 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-JAK2 (phospho Y1007 + Y1008) antibody [E132] (ab200339)

Flow Cytometry analysis of Jurkat (human acute T cell leukemia) starved of serum for 16 hours then treated with 1 mM Pervanadate for 30 minutes cells labeling JAK2 (phospho Y1007 + Y1008) with purified ab200339 at 1/50 dilution (10 ug/mL) (Red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit lgG (Alexa Fluor®488) was used as the secondary antibody. Rabbit monoclonal lgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control. Unstimulated Jurkat cells were used as a negative control (Green).



Research with confidence Consistent and reproducible results

Long-term and scalable supply Recombinant technology





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