abcam

Product datasheet

Anti-c-Kit (phospho Y823) antibody ab5634

1 References 2 图像

概述

产品名称	Anti-c-Kit (phospho Y823)**抗体**
描述	**兔多克隆抗体**to c-Kit (phospho Y823)
宿主	Rabbit
经测试应用	**适用于:** ICC, WB
种属反应性	**与反应:** Human **预测可用于:** Mouse, Rat, Chicken, Cow, Dog
免疫原	Synthetic peptide corresponding to c-Kit (phospho Y823).
阳性对照	WB: M07e cells +/- SCF. ICC: Jurkat cells.
常规说明	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. 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

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	pH: 7.3 Preservative: 0.05% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.1% BSA
纯度	Immunogen affinity purified
纯化说明	The antibody has been negatively preadsorbed using a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated c Kit protein. The final product is generated by affinity chromatography using a c Kit derived peptide that is phosphorylated at tyrosine 823.
克隆	**多克隆**

同种型	IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab5634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
ICC		1/250.
WB		1/1000. Detects a band of approximately 145 kDa.

靶标

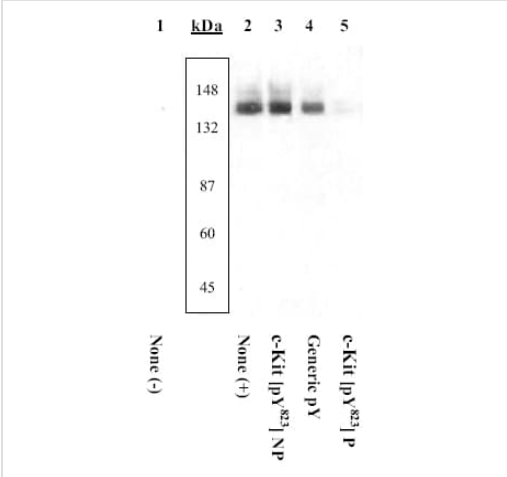
功能	Tyrosine-protein kinase that acts as cell-surface receptor for the cytokine KITLG/SCF and plays an essential role in the regulation of cell survival and proliferation, hematopoiesis, stem cell maintenance, gametogenesis, mast cell development, migration and function, and in melanogenesis. In response to KITLG/SCF binding, KIT can activate several signaling pathways. Phosphorylates PIK3R1, PLCG1, SH2B2/APS and CBL. Activates the AKT1 signaling pathway by phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase. Activated KIT also transmits signals via GRB2 and activation of RAS, RAF1 and the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1. Promotes activation of STAT family members STAT1, STAT3, STAT5A and STAT5B. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. KIT signaling is modulated by protein phosphatases, and by rapid internalization and degradation of the receptor. Activated KIT promotes phosphorylation of the protein phosphatases PTPN6/SHP-1 and PTPRU, and of the transcription factors STAT1, STAT3, STAT5A and STAT5B. Promotes phosphorylation of PIK3R1, CBL, CRK (isoform Crk-II), LYN, MAPK1/ERK2 and/or MAPK3/ERK1, PLCG1, SRC and SHC1.
组织特异性	Isoform 1 and isoform 2 are detected in spermatogonia and Leydig cells. Isoform 3 is detected in round spermatids, elongating spermatids and spermatozoa (at protein level). Widely expressed. Detected in the hematopoietic system, the gastrointestinal system, in melanocytes and in germ cells.
疾病相关	Piebald trait Gastrointestinal stromal tumor Testicular germ cell tumor Leukemia, acute myelogenous
序列相似性	Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily. Contains 5 Ig-like C2-type (immunoglobulin-like) domains. Contains 1 protein kinase domain.
翻译后修饰	Ubiquitinated by SOCS6. KIT is rapidly ubiquitinated after autophosphorylation induced by KITLG/SCF binding, leading to internalization and degradation. Autophosphorylated on tyrosine residues. KITLG/SCF binding enhances autophosphorylation. Isoform 1 shows low levels of tyrosine phosphorylation in the absence of added KITLG/SCF (in vitro). Kinase activity is down-regulated by phosphorylation on serine residues by protein kinase C family members. Phosphorylation at Tyr-568 is required for interaction with PTPN11/SHP-2,

CRK (isoform Crk-II) and members of the SRC tyrosine-protein kinase family. Phosphorylation at Tyr-570 is required for interaction with PTPN6/SHP-1. Phosphorylation at Tyr-703, Tyr-823 and Tyr-936 is important for interaction with GRB2. Phosphorylation at Tyr-721 is important for interaction with PIK3R1. Phosphorylation at Tyr-823 and Tyr-936 is important for interaction with GRB7.

细胞定位

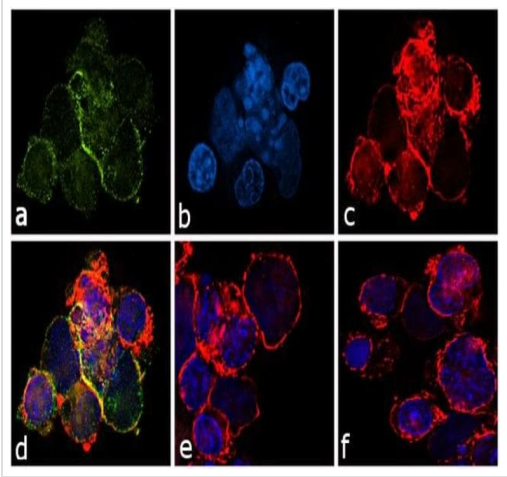
Cell membrane and Cytoplasm. Detected in the cytoplasm of spermatozoa, especially in the equatorial and subacrosomal region of the sperm head.

图片



Western blot - Anti-c-Kit (phospho Y823) antibody (ab5634)

Peptide Competition: Extracts prepared from M07e cells left untreated (1) or treated (2-5) with SCF were resolved by SDS-PAGE on a 10% Tris-glycine gel and transferred to PVDF. Membranes were blocked with a 5% BSA-TBST buffer overnight at 4°C, then were incubated with 0.50 µg/mL ab5634 antibody for two hours at room temperature in a 1% BSA-TBST buffer, following prior incubation with: no peptide (1, 2), the non-phosphopeptide corresponding to the immunogen (3), a generic phosphotyrosine containing peptide (4), or, the phosphopeptide immunogen (5). After washing, membranes were incubated with goat F(ab')2 anti-rabbit IgG alkaline phosphatase and signals were detected using the Tropix WesternStar method. The data show that only the peptide corresponding to ab5634 blocks the antibody signal, thereby demonstrating the specificity of the antibody. Peptide Competition: Extracts prepared from M07e cells left untreated (1) or treated (2-5) with SCF were resolved



Immunocytochemistry - Anti-c-Kit (phospho Y823) antibody (ab5634)

Jurkat cells stained for c-Kit cleave site (green) using ab5634 at 1/250 dilution in ICC/IF. It was followed by Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate at 1/2000 dilution for 45 minutes at room temperature (Panel a). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI. F-actin (Panel c: red) was stained with Rhodamine Phalloidin at 1/300 dilution. Panel d represents the merged image showing membranous localization. Panel e shows the untreated control cells with no signal. Panel f shows the no primary antibody control.

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