# abcam

# Product datasheet

# PE/Cy5® Anti-c-Kit antibody [104D2], prediluted ab157301

# 4 References

# 概述

产品名称 PE/Cy5® Anti-c-Kit抗体[104D2], prediluted

描述 PE/Cy5®小鼠单克隆抗体[104D2] to c-Kit, prediluted

**宿主** Mouse

偶联物 PE/Cy5®. Ex: 496nm, Em: 670nm

特异性 ab157301 detects the extracellular part of c-Kit.

经测试应用 适用于: Flow Cyt

种属反应性 与反应: Cow, Human, Non human primates

免疫原 Tissue, cells or virus corresponding to Human c-Kit. MOLM-1 megakaryocytic cells.

阳性对照 Human blood cells.

常规说明 Purified antibody is conjugated with tandem dye PE/Cy5<sup>®</sup> under optimum conditions. The

conjugate is purified by size-exclusion chromatography and adjusted for direct use.

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. Store at +4°C.

**存储溶液** pH: 7.4

Preservative: 0.1% Sodium azide Constituents: 99% PBS, 0.2% BSA

纯度 Size exclusion

 克隆
 单克隆

 克隆编号
 104D2

 同种型
 IgG1

1

# The Abpromise guarantee

#### Abpromise™承诺保证使用ab157301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		Use at an assay dependent concentration. (or 100 ul of whole blood). <u>ab67435</u> - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.

#### 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 stro

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 lg-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.

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