# abcam

## Product datasheet

## Anti-c-Kit (phospho Y703) antibody ab62154

★★★★★ 1 Abreviews 8 References 画像数 2

#### 製品の概要

免疫原

製品名 Anti-c-Kit (phospho Y703) antibody

製品の詳細 Rabbit polyclonal to c-Kit (phospho Y703)

由来種 Rabbit

**アプリケーション** 適用あり: WB

種交差性 交差種: Human

交差が予測される動物種: Mouse 🔷

Synthetic peptide corresponding to Human c-Kit (phospho Y703). (A-L-YP-K-N)

Database link: P10721

ポジティブ・コントロール WB: HepG2 treated with EGF cell lysate; Colon cancer lysate; U2OS lysate; Renal cancer cell line

lysate.

**特記事項**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

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

**バッファー** pH: 7

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

精製度 Immunogen affinity purified

特記事項(精製) ab62154 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-

specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

ポリ/モノ ポリクローナル

1

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab62154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検討ください。

アプリケーション	Abreviews	特記事項
WB	*** <u>*</u>	1/500 - 1/1000. Predicted molecular weight: 109 kDa.

## ターゲット情報

#### 機能

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.

#### 組織特異性

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.

#### 関連疾患

Piebald trait

Gastrointestinal stromal tumor Testicular germ cell tumor Leukemia, acute myelogenous

#### 配列類似性

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.

#### 翻訳後修飾

Ubiquitinated by SOCS6. KIT is rapidly ubiquitinated after autophosphorylation induced by KITLG/SCF binding, leading to internalization and degradation.

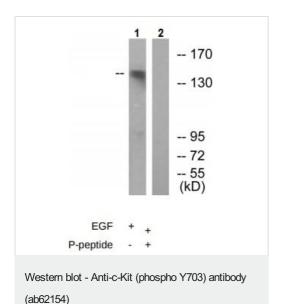
Autophosphorylated on tyrosine residues. KITLG/SCF binding enhances autophosphorylation. Isoform 1 shows low levels of tyrosine phosphorylation in the absence of added KITLG/SCF (in vitro). Kinase activity is down-regulated by phosphorylation on serine residues by protein kinase C family members. Phosphorylation 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.

#### 細胞内局在

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

### 画像

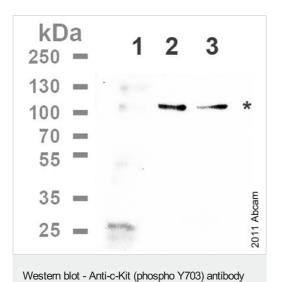


**All lanes :** Anti-c-Kit (phospho Y703) antibody (ab62154) at 1/500 dilution

**Lane 1 :** HepG2 (human liver hepatocellular carcinoma cell line) treated with EGF (200ng/ml, 30mins) cell lysate

Lane 2: HepG2 treated with EGF (200ng/ml, 30mins) cell lysate with immunizing phosphopeptide

Predicted band size: 109 kDa



Secondary

All lanes: Swine anti-rabbit HRP at 1/5000 dilution

All lanes: Anti-c-Kit (phospho Y703) antibody (ab62154)

Developed using the ECL technique.

Lane 1: Colon cancer lysate (human)

Lane 3: Renal cancer cell line (human)

Lane 2: U2OS lysate (human)

Performed under reducing conditions.

Predicted band size: 109 kDa

This image is courtesy of an Abreview submitted by Antibody Solutions

(ab62154)

Exposure time: 6 minutes

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

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