# abcam

# Product datasheet

# Anti-c-Kit antibody [EPR22566-344] - BSA and Azide free ab272020

ייבערעדער RabMAb

★★★★★ 1 Abreviews 画像数 4

#### 製品の概要

製品名 Anti-c-Kit antibody [EPR22566-344] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR22566-344] to c-Kit - BSA and Azide free

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P

適用なし: Flow Cyt,ICC/IF,IHC-Fr or IP

種交差性 交差種: Mouse, Rat

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール IHC-P: Mouse cerebellum and testis tissue, rat testis tissue.

特記事項 Not recommended for human IHC.

ab272020 is the carrier-free version of ab256345.

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

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

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

**バッファー** pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

**ポリ/モノ** モノクローナル

**クローン名** EPR22566-344

アイソタイプ lgG

## 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ab272020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		Use at an assay dependent concentration. Predicted molecular weight: 109 kDa.
IHC-P	**** (1)	Use at an assay dependent concentration.  Not recommended for human IHC.

追加情報

Is unsuitable for Flow Cyt,ICC/IF,IHC-Fr or IP.

# 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 PlK3R1, PLCG1, SH2B2/APS and CBL. Activates the AKT1 signaling pathway by phosphorylation of PlK3R1, 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

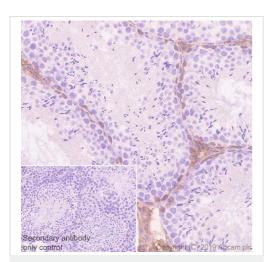
GRB7.

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



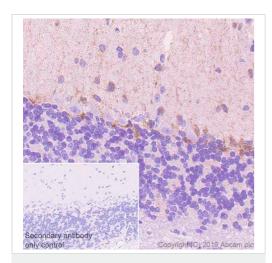
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-c-Kit antibody

[EPR22566-344] - BSA and Azide free (ab272020)

Immunohistochemical analysis of paraffin-embedded mouse testis tissue labeling c-Kit with <a href="mailto:ab256345">ab256345</a> at 1/4000 dilution (0.16 µg/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<a href="mailto:ab209101">ab209101</a>). Positive staining on spermatogonia and Leydig cells of mouse testis (PMID: 29324782). The section was incubated with <a href="mailto:ab256345">ab256345</a> for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins.

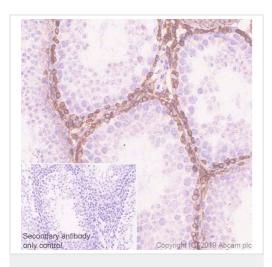
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab256345</u>).



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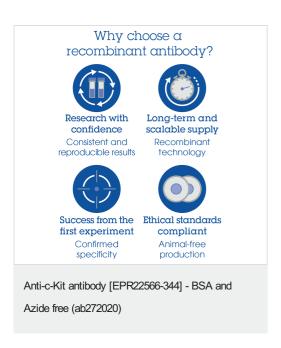
Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue labeling c-Kit with <u>ab256345</u> at 1/4000 dilution (0.16 μg/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). Positive staining in Purkinje cells of mouse cerebellum (PMID: 15100248). The section was incubated with <u>ab256345</u> for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument. Counterstained with hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>).

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