abcam

Product datasheet

Anti-c-Kit antibody [YR145] - BSA and Azide free ab216450

KO 評価済 リコンビナント RabMAb

1 Abreviews 10 References 画像数 9

製品の概要

製品名	Anti-c-Kit antibody [YR145] - BSA and Azide free
製品の詳細	Rabbit monoclonal [YR145] to c-Kit - BSA and Azide free
由来種	Rabbit
特異性	This antibody is specific to c-Kit. It does not crossreact with other CSF1/PDGF receptor family member.
アプリケーション	**適用あり:** WB, IHC-P **適用なし:** Flow Cyt or ICC/IF
種交差性	**交差種:** Human, Common marmoset
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Human fetal kidney, fetal lung and seminoma tissue lysate. IHC-P: Human lung adenocarcinoma and seminoma tissues.
特記事項	ab216450 is the carrier-free version of **ab32363**. 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 cell-based 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® 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

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

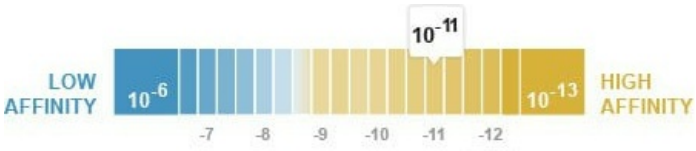
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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.

解離定数（K_D 値） $K_D = 5.90 \times 10^{-11}$ M



Learn more about K_D

バッファー pH: 7.20
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 YR145

アイソタイプ IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab216450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: 110 kDa.
IHC-P	★★★☆☆ (1)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.

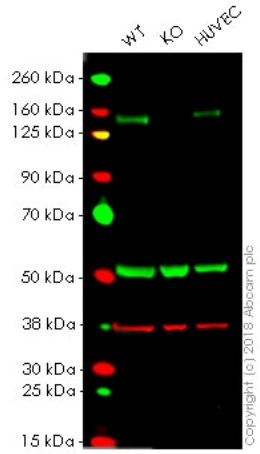
追加情報 Is unsuitable for Flow Cyt or ICC/IF.

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 Ig-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



Western blot - Anti-c-Kit antibody [YR145] - BSA and Azide free (ab216450)

All lanes : Anti-c-Kit antibody [YR145] (**ab32363**) at 1/1000 dilution

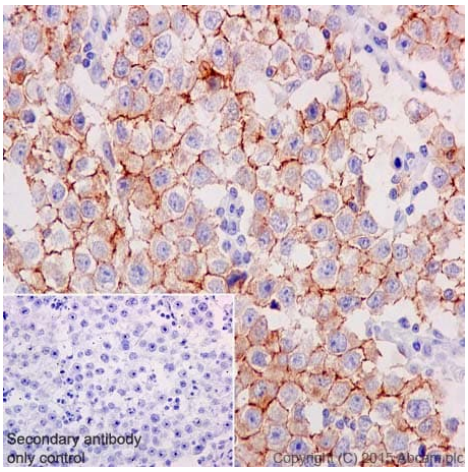
Lane 1 : Wild-type HAP1 whole cell lysate
Lane 2 : KIT knockout HAP1 whole cell lysate
Lane 3 : HUVEC whole cell lysate

Lysates/proteins at 40 µg per lane.

Predicted band size: 110 kDa

Lanes 1 - 3: Merged signal (red and green). Green - **ab32363** observed at 109 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

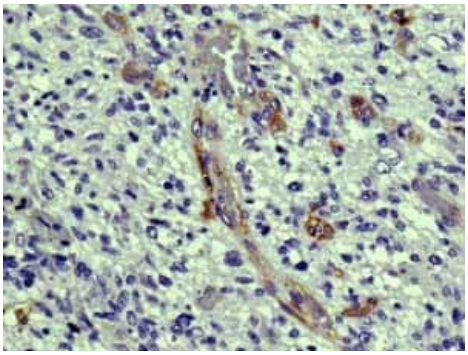
ab32363 was shown to recognize c-Kit in wild-type HAP1 cells as signal was lost at the expected MW in c-Kit knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and KIT knockout samples were subjected to SDS-PAGE. Ab32363 and **ab9484** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-c-Kit antibody [YR145] - BSA and Azide free (ab216450)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human seminoma tissue labelling c-Kit with purified **ab32363** at 1/400. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32363**).

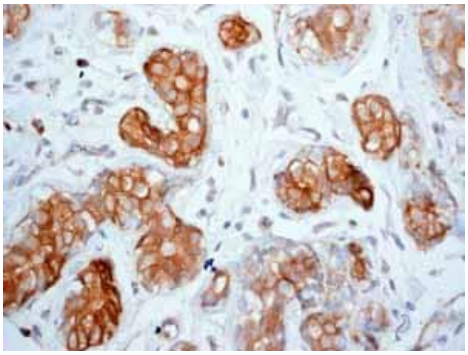


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-c-Kit antibody [YR145] - BSA and Azide free (ab216450)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human glioma tissue labelling c-Kit with unpurified **ab32363**.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32363**).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

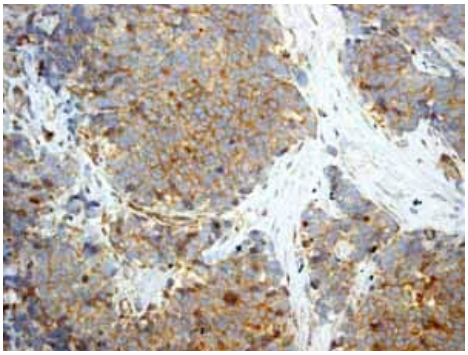


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-c-Kit antibody [YR145] - BSA and Azide free (ab216450)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labelling c-Kit with unpurified **ab32363**.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32363**).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

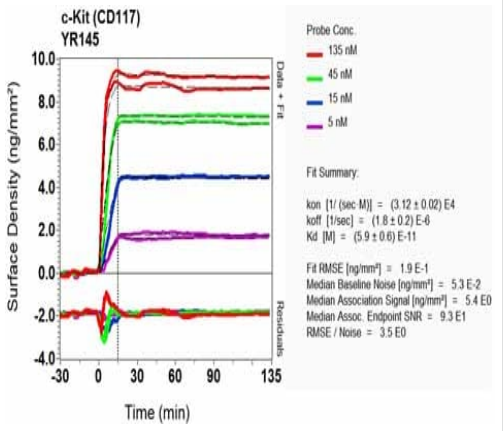


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-c-Kit antibody [YR145] - BSA and Azide free (ab216450)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human ovarian carcinoma tissue labelling c-Kit with unpurified **ab32363**.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32363**).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



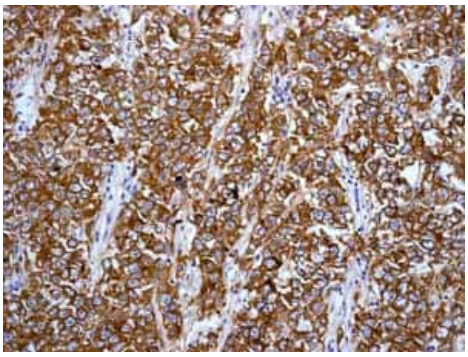
OI-RD Scanning - Anti-c-Kit antibody [YR145] - BSA and Azide free (ab216450)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab32363**).

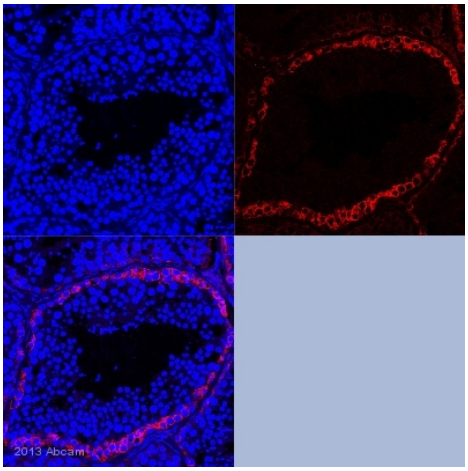


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-c-Kit antibody [YR145] - BSA and Azide free (ab216450)

This IHC data was generated using the same anti-C-Kit antibody clone, YR145, in a different buffer formulation (cat# **ab32363**).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human seminoma tissue labelling c-Kit with unpurified **ab32363**.

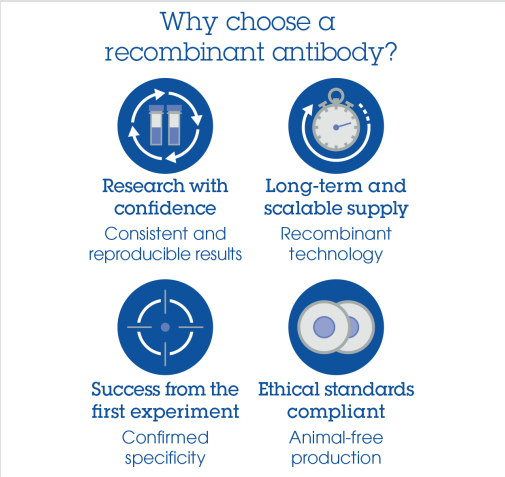
Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-c-Kit antibody [YR145] - BSA and Azide free (ab216450)

This IHC data was generated using the same anti-C-Kit antibody clone, YR145, in a different buffer formulation (cat# **ab32363**).

IHC-P image of c-Kit (unpurified **ab32363**) staining on adult marmoset testis. The sections were fixed in formaldehyde and underwent heat mediated antigen retrieval, using Dako antigen retrieval solution. The sections were then blocked in 5% milk for 30 mins at 25°C. The primary antibody was added at a 1/100 dilution, and then incubated for 18 hours at 4°C. Dapi was used to stain the nuclei (blue).



Anti-c-Kit antibody [YR145] - BSA and Azide free

(ab216450)

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