# abcam

## Product datasheet

## Anti-MERTK antibody [Y323] ab52968



יובענדער RabMAb

★★★★★ 4 Abreviews 57 References 画像数 9

### 製品の概要

製品名 Anti-MERTK antibody [Y323]

製品の詳細 Rabbit monoclonal [Y323] to MERTK

由来種 Rabbit

アプリケーション 適用あり: WB, IP, IHC-P, IHC-Fr

適用なし: Flow Cyt or ICC/IF

種交差性 交差種: Human

免疫原 Synthetic peptide within Human MERTK aa 1-100 (N terminal). The exact sequence is

proprietary.

ポジティブ・コントロール WB: A172, HEK-293 and K562 cell lysate. ild-type HAP1 whole cell lysate IHC-P: Human tonsil

and lymphoma tissues. IP: MERTK IP in HEK-293 cell lysate. IHC-Fr: Human spleen tissue

sections.

特記事項 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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol, 0.05% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル

**ウローン名** Y323 アイソタイプ IgG

#### 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ab52968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	<b>★★★★★ (1)</b>	1/2000. Detects a band of approximately 180 kDa. For unpurified use at 1/500.
IP		1/20. For unpurified use at 1/50.
IHC-P	* * * * * (3)	1/1000 - 1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> .
IHC-Fr		Use at an assay dependent concentration.

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

#### ターゲット情報

機能 In case of filovirus infection, seems to function as a cell entry factor.

組織特異性 Not expressed in normal B- and T-lymphocytes but is expressed in numerous neoplastic B- and T-

cell lines.

**関連疾患** Defects in MERTK are the cause of retinitis pigmentosa type 38 (RP38) [MIM:613862]. RP38 is a

retinal dystrophy belonging to the group of pigmentary retinopathies. Retinitis pigmentosa is characterized by retinal pigment deposits visible on fundus examination and primary loss of rod photoreceptor cells followed by secondary loss of cone photoreceptors. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they

lose their far peripheral visual field and eventually central vision as well.

**配列類似性** Belongs to the protein kinase superfamily. Tyr protein kinase family. AXL/UFO subfamily.

Contains 2 fibronectin type-III domains.

Contains 2 lg-like C2-type (immunoglobulin-like) domains.

Contains 1 protein kinase domain.

細胞内局在 Membrane.

#### 画像



Western blot - Anti-MERTK antibody [Y323] (ab52968)

CV1 A172 HeLa

245 —

180 —

135 —

100 —

75 —

63 —

48 —

35 —

Western blot - Anti-MERTK antibody [Y323] (ab52968)

**All lanes :** Anti-MERTK antibody [Y323] (ab52968) at 1/500 dilution

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: MERTK knockout HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

**Lanes 1 - 2:** Merged signal (red and green). Green - ab52968 observed at 110 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab52968 was shown to specifically react with MERTK in wild-type HAP1 cells as signal was lost in MERTK knockout cells. Wild-type and MERTK knockout samples were subjected to SDS-PAGE. The membrane was blocked with 0. Ab52968 and <a href="mailto:ab8245">ab8245</a> (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/500 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed <a href="mailto:ab216773">ab216773</a> and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed <a href="mailto:ab216776">ab216776</a> secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

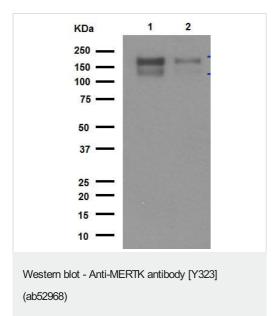
ab52968 used at a 1/200 dilution, 18 hours at 4°C, 5% BSA in Tween PBS.

Positive cell line: A172

Negative cell lines: CV1 and HeLa.

Secondary used is a goat anti-rabbit polyclonal-HRP at 1/10000 dilution.

Blocked with 5% milk for 1 hour at RT.



**All lanes :** Anti-MERTK antibody [Y323] (ab52968) at 1/2000 dilution (purified)

**Lane 1**: HEK-293 (Human epithelial cell line from embryonic kidney) cell lysate

**Lane 2**: K562 (Human chronic myelogenous leukemia cell line from bone marrow) cell lysate

Lysates/proteins at 20 µg per lane.

## Secondary

**All lanes :** Peroxidase-conjugated goat anti-rabbit lgG at 1/1000 dilution

Observed band size: 140-180 kDa

HP

KDa

250—
150—
150—
100—
75—
4

MERTK

100—
37—
4

MERTK

Immunoprecipitation - Anti-MERTK antibody [Y323] (ab52968)

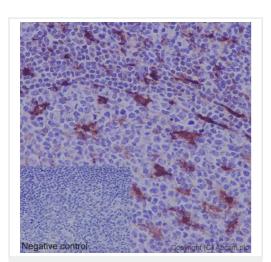
Blocking/Dilution buffer and concentration: 5% NFDM/TBST.

**Lane 1:** ab52968 (purified) at 1/20 immunoprecipitating MERTK in HEK-293 (Human epithelial cell line from embryonic kidney) cell lysate.

#### Lane 2 - PBS.

For western blotting, a HRP-conjugated anti-rabbit lgG, specific to the non-reduced form of lgG was used as the secondary antibody (1/1500).

Blocking/Dilution buffer and concentration: 5% NFDM/TBST.

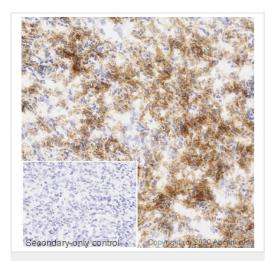


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MERTK antibody [Y323] (ab52968)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labeling MERTK with purified ab52968 at 1/500.

Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. <u>ab97051</u>, a HRP-conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody (1/500). Counterstained with hematoxylin.

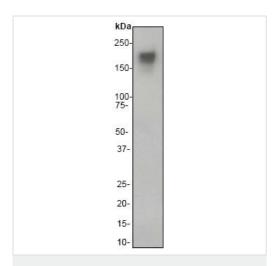
Negative control using PBS instead of primary antibody (Inset).



Immunohistochemistry (Frozen sections) - Anti-MERTK antibody [Y323] (ab52968)

IHC image of MERTK staining in a section of frozen normal human spleen performed on a Leica BOND<sup>TM</sup> system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with ab52968, 1/1000 dilution, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



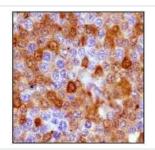
Western blot - Anti-MERTK antibody [Y323] (ab52968)

Anti-MERTK antibody [Y323] (ab52968) at 1/1000 dilution (unpurified) + HEK-293 (Human epithelial cell line from embryonic kidney) cell lysate at 10 µg

## Secondary

HRP-conjugated goat anti-rabbit lgG at 1/2000 dilution

Observed band size: 180 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MERTK antibody [Y323] (ab52968)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lymphoma tissue labeling MERTK with unpurified ab52968 at a 1/50 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



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