abcam

Product datasheet

Anti-MERTK antibody [EPR17534-139] ab184086

Recombinant RabMAb

2 References 7 Images

Overview

Product name	Anti-MERTK antibody [EPR17534-139]
Description	Rabbit monoclonal [EPR17534-139] to MERTK
Host species	Rabbit
Tested applications	**Suitable for:** IHC-Fr, WB, IHC-P, IP **Unsuitable for:** Flow Cyt
Species reactivity	**Reacts with:** Mouse
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: NIH/3T3 cell lysate; Mouse spleen and liver tissue lysate. IHC-P: Mouse liver and spleen tissue. IP: Mouse spleen tissue lysate. IHC-Fr: Mouse frozen spleen and liver tissue sections.
General notes	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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR17534-139

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab184086 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr		Use a concentration of 0.1 - 0.5 µg/ml.
WB		1/1000. Predicted molecular weight: 110 kDa.
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/40.

Application notes Is unsuitable for Flow Cyt.

Target

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

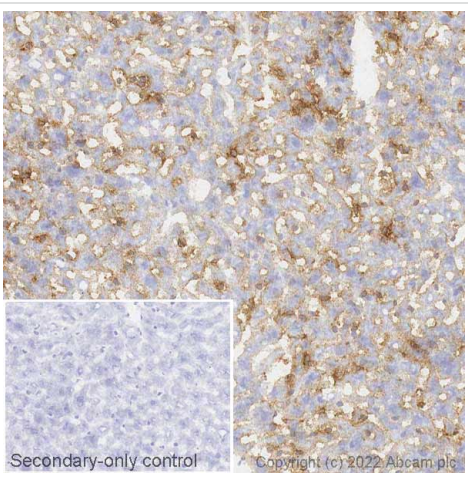
Tissue specificity Not expressed in normal B- and T-lymphocytes but is expressed in numerous neoplastic B- and T-cell lines.

Involvement in disease 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.

Sequence similarities Belongs to the protein kinase superfamily. Tyr protein kinase family. AXL/UFO subfamily.
Contains 2 fibronectin type-III domains.
Contains 2 Ig-like C2-type (immunoglobulin-like) domains.
Contains 1 protein kinase domain.

Cellular localization Membrane.

Images

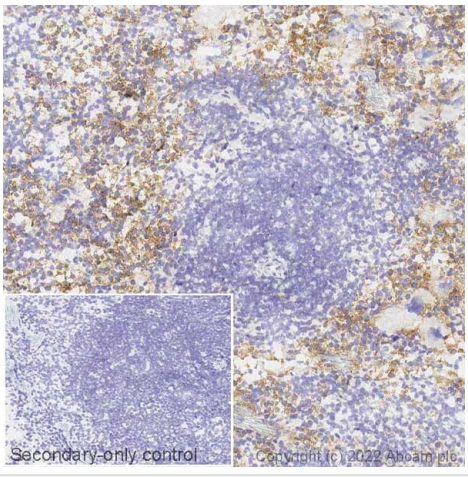


Immunohistochemistry (Frozen sections) - Anti-MERTK antibody [EPR17534-139] (ab184086)

Lab

IHC image of MERTK staining in a section of frozen mouse normal liver performed on a Leica Biosystems BOND® RX instrument using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with ab184086, 0.5ugml, 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.

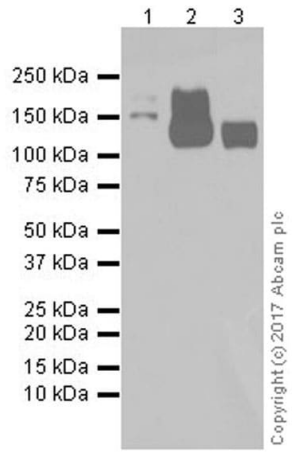


Immunohistochemistry (Frozen sections) - Anti-MERTK antibody [EPR17534-139] (ab184086)

Lab

IHC image of MERTK staining in a section of frozen mouse normal spleen performed on a Leica Biosystems BOND® RX instrument using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with ab184086, 0.1ugml, 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 [EPR17534-139] (ab184086)

All lanes : Anti-MERTK antibody [EPR17534-139] (ab184086) at 1/1000 dilution

Lane 1 : NIH/3T3 (mouse embryonic fibroblast), whole cell lysate
Lane 2 : Mouse spleen tissue lysate
Lane 3 : Mouse liver tissue lysate

Lysates/proteins at 20 µg per lane.

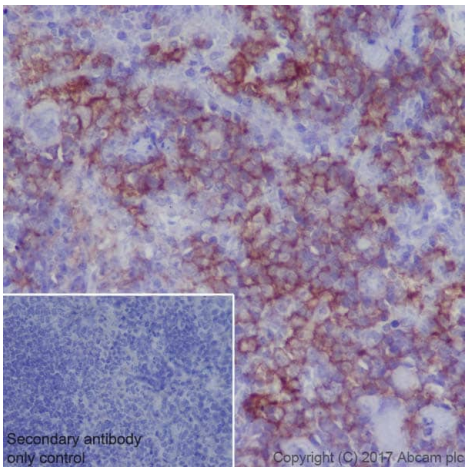
Secondary
All lanes : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 110 kDa
Observed band size: 110-140,180-210 kDa

Exposure time: 3 minutes

The expression profile observed is consistent with what has been described in the literature (PMID: 17047157).

Blocking/Diluting buffer and concentration: 5% NFDM/TBST

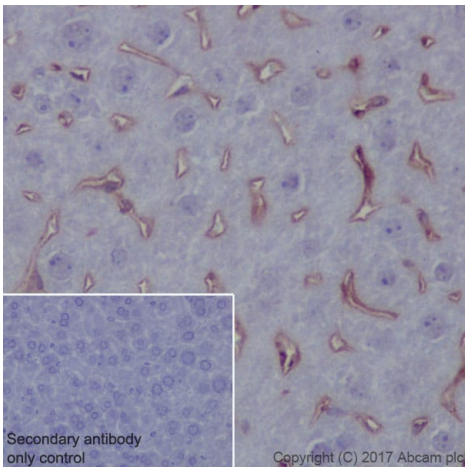


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MERTK antibody [EPR17534-139] (ab184086)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling MERTK with ab184086 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Membranous staining on mouse spleen (PMID: 19631584) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

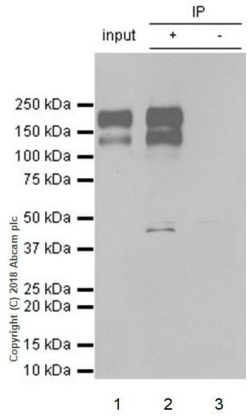


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MERTK antibody [EPR17534-139] (ab184086)

Immunohistochemical analysis of paraffin-embedded mouse liver tissue labeling MERTK with ab184086 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Positive staining on hepatic sinusoids of mouse liver (PMID: 23799121) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-MERTK antibody [EPR17534-139] (ab184086)

MERTK was immunoprecipitated from 10 µg of mouse spleen tissue lysate with ab184086 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab184086 at 1/1000 dilution. Secondary used is VeriBlot for IP Detection Reagent (HRP) (**ab131366**) at a 1/10,000 dilution.

Lane 1: Mouse spleen tissue lysate, 10 µg (input).
Lane 2: ab184086 IP in mouse spleen tissue lysate (+)
Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab184086 in mouse spleen lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST
Exposure time: 5 seconds

The molecular masses observed are consistent with what has been described in the literature. The band at approximately 50 kDa likely represents a cleavage fragment (PMID: 17047157, 15673687).

Anti-MERTK antibody [EPR17534-139] (ab184086)

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