

## Product datasheet

# Anti-Midkine antibody [EP1143Y] ab52637

KO VALIDATED Recombinant RabMAB

★★★★☆ 1 Abreviews 21 References 11 Images

### Overview

<b>Product name</b>	Anti-Midkine antibody [EP1143Y]
<b>Description</b>	Rabbit monoclonal [EP1143Y] to Midkine
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IP, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human, Recombinant fragment
<b>Immunogen</b>	Synthetic peptide corresponding to Human Midkine aa 100 to the C-terminus (C terminal).
<b>Positive control</b>	Human liver carcinoma; Human pancreatic carcinoma; HeLa cells; SH-SY5Y (Human neuroblastoma cell line from bone marrow).
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAB<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAB<sup>®</sup> patents</a>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

Clone number EP1143Y  
Isotype IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab52637 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
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB	★★★★☆ (1)	1/1000. Detects a band of approximately 16 kDa (predicted molecular weight: 16 kDa). <b>For unpurified use at 1/500.</b>
IP		1/20. <b>For unpurified use at 1/30.</b>
IHC-P		1/50. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100. <b>For unpurified use at 1/250 - 1/500.</b>

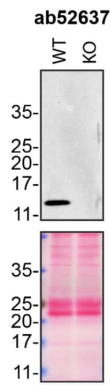
## Target

**Function** Has heparin binding activity, and growth promoting activity. Involved in neointima formation after arterial injury, possibly by mediating leukocyte recruitment. Also involved in early fetal adrenal gland development.

**Sequence similarities** Belongs to the pleiotrophin family.

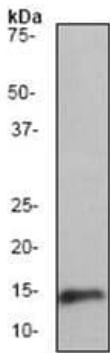
**Cellular localization** Secreted.

## Images



Western blot - Anti-Midkine antibody [EP1143Y] (ab52637)

ab52637 was shown to react with MDK in wild-type HAP1 cells in Western blot with loss of signal observed in a MDK knockout cell line. Wild-type HAP1 and MDK knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 5% milk in TBST for 1 hr before incubation with ab52637 overnight at 4 °C at a 1/500 dilution. Blots were incubated with goat anti-rabbit HRP secondary antibodies at 0.2 µg/ml before imaging. These data were provided by YCharOS Inc., an open science company with the mission of characterizing commercially available antibody reagents for all human proteins. Abcam and YCharOS are working together to help address the reproducibility crisis by enabling the life science community to better evaluate commercially available antibodies.



Western blot - Anti-Midkine antibody [EP1143Y] (ab52637)

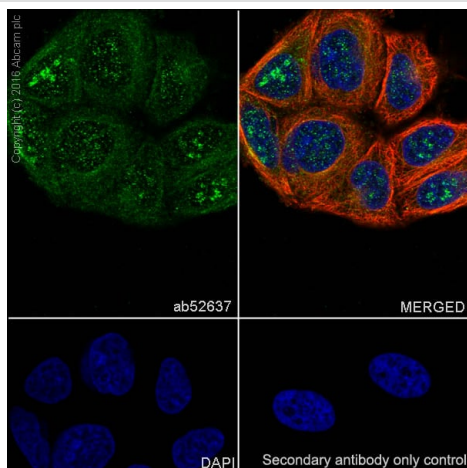
Anti-Midkine antibody [EP1143Y] (ab52637) at 1/500 dilution (unpurified) + Recombinant protein at 0.001 µg

### Secondary

Goat anti-rabbit HRP labeled at 1/2000 dilution

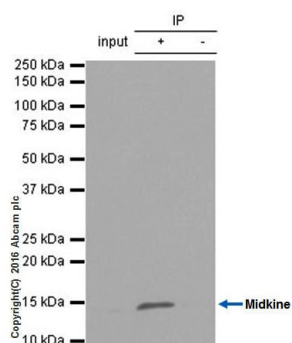
**Predicted band size:** 16 kDa

**Observed band size:** 16 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Midkine antibody [EP1143Y] (ab52637)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Midkine with purified ab52637 at 1:100 dilution (10.5µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). **ab150077** Goat anti rabbit IgG(Alexa Fluor® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunoprecipitation - Anti-Midkine antibody  
[EP1143Y] (ab52637)

ab52637 (purified) at 1:20 dilution (2ug) immunoprecipitating Midkine in SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate.

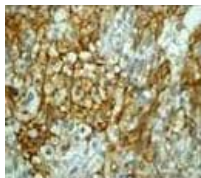
**Lane 1 (input):** SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate 10ug

**Lane 2 (+):** ab52637 & SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate

**Lane 3 (-):** Rabbit monoclonal IgG ([ab172730](#)) instead of ab52637 in SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) was used for detection at 1:5000 dilution.

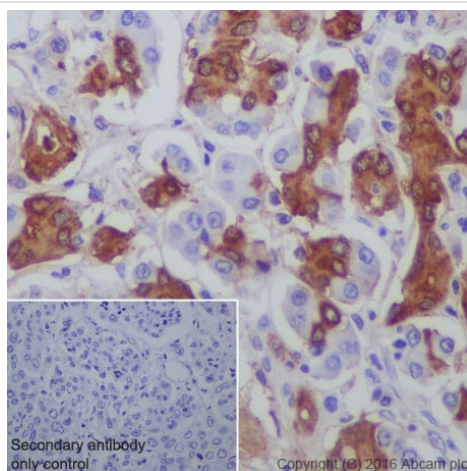
Blocking and diluting buffer: 5% NFDm/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Midkine antibody  
[EP1143Y] (ab52637)

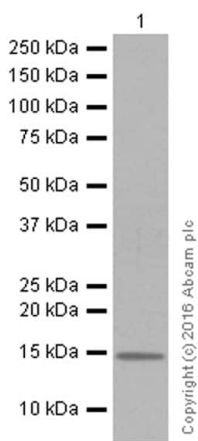
Human liver carcinoma stained with unpurified ab52637 at 1/100 - 1/250 dilution

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-Midkine antibody [EP1143Y]  
(ab52637)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human pancreatic carcinoma tissue sections labeling Midkine with purified ab52637 at 1:50 dilution (2.1 µg/ml). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using EDTA Buffer, pH9.0. Tissue was counterstained with Hematoxylin. [ab97051](#) Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used at 1:500 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-Midkine antibody [EP1143Y]  
(ab52637)

Anti-Midkine antibody [EP1143Y] (ab52637) at 1/1000 dilution  
(purified) + SH-SY5Y (Human neuroblastoma epithelial cell) whole  
cell lysates at 15 µg

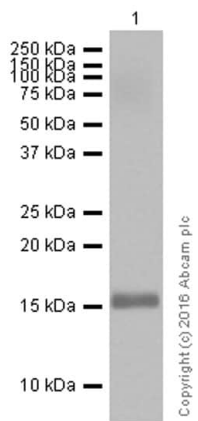
**Secondary**

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 16 kDa

**Observed band size:** 16 kDa

Blocking and diluting: 5% NFDm/TBST



Western blot - Anti-Midkine antibody [EP1143Y]  
(ab52637)

Anti-Midkine antibody [EP1143Y] (ab52637) at 1/10000 dilution  
(purified) + Recombinant Human Midkine protein ([ab49848](#)) at 15  
µg

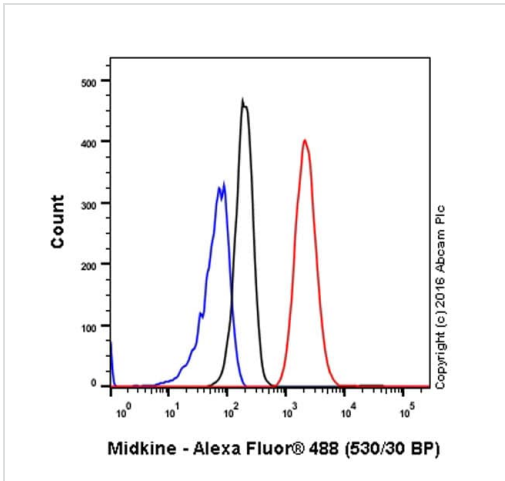
**Secondary**

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 16 kDa

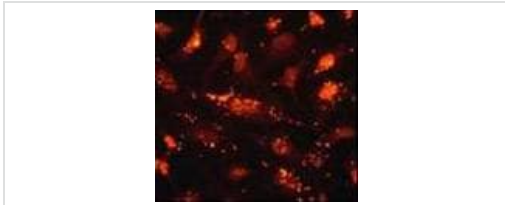
**Observed band size:** 16 kDa

Blocking and diluting buffer: 5% NFDm/TBST



Flow Cytometry (Intracellular) - Anti-Midkine antibody [EP1143Y] (ab52637)

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling Midkine with purified ab52637 at 1/250 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Immunocytochemistry/ Immunofluorescence - Anti-Midkine antibody [EP1143Y] (ab52637)

HeLa cells stained with unpurified ab52637 at 1/250 - 1/500 dilution

Why choose a recombinant antibody?

 <b>Research with confidence</b> Consistent and reproducible results	 <b>Long-term and scalable supply</b> Recombinant technology
 <b>Success from the first experiment</b> Confirmed specificity	 <b>Ethical standards compliant</b> Animal-free production

Anti-Midkine antibody [EP1143Y] (ab52637)

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

**Our Abpromise to you: Quality guaranteed and expert technical support**

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery

- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors