

## Product datasheet

### Anti-MetRS/MARS antibody [EPR9872] ab180497

Recombinant RabMAb

[2 References](#) [12 Images](#)

#### Overview

<b>Product name</b>	Anti-MetRS/MARS antibody [EPR9872]
<b>Description</b>	Rabbit monoclonal [EPR9872] to MetRS/MARS
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), IHC-P, WB, IP, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human MetRS/MARS aa 150-250. The exact sequence is proprietary. Database link: <a href="#">P56192</a>
<b>Positive control</b>	WB: HeLa, HepG2, SW480, Caco2 and PC-12 lysates. IHC-P: human thyroid carcinoma and brain tissues, and rat kidney tissue. ICC/IF: HeLa cells. Flow Cyt (intra): HeLa cells. IP: HepG2 cells.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <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> For more information <a href="#">see here</a> . 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> .

#### 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 long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR9872

Isotype

IgG

## Applications

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### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab180497 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)		1/20.
IHC-P		1/4000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. For unpurified use at 1/50 See <b><u>IHC antigen retrieval protocols</u></b> .
WB		1/10000 - 1/50000. Detects a band of approximately 101 kDa (predicted molecular weight: 101 kDa).
IP		1/20 - 1/40.
ICC/IF		1/50 - 1/250.

## Target

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### Sequence similarities

Belongs to the class-I aminoacyl-tRNA synthetase family.  
Contains 1 GST C-terminal domain.  
Contains 1 WHEP-TRS domain.

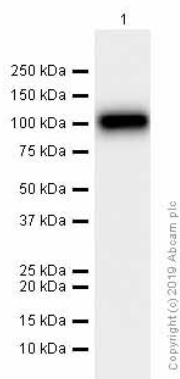
### Cellular localization

Cytoplasm.

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## Images

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Western blot - Anti-MetRS/MARS antibody [EPR9872] (ab180497)

**All lanes :** Anti-MetRS/MARS antibody [EPR9872] (ab180497) at 1/10000 dilution (Purified)

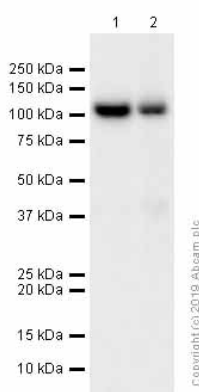
**Lane 1 :** PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysates at 15  $\mu$ g

#### Secondary

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

**Predicted band size:** 101 kDa

**Observed band size:** 101 kDa



Western blot - Anti-MetRS/MARS antibody [EPR9872] (ab180497)

**All lanes :** Anti-MetRS/MARS antibody [EPR9872] (ab180497) at 1/50000 dilution (Purified)

**Lane 1 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

**Lane 2 :** HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates

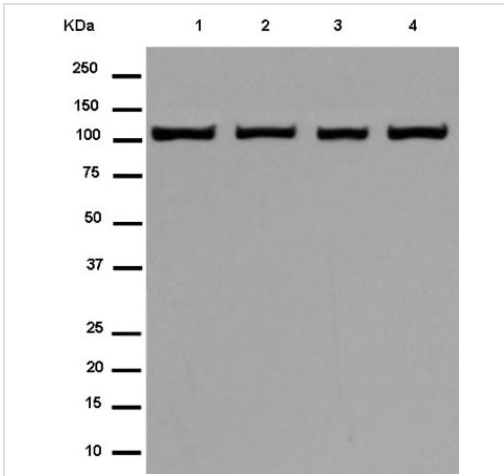
Lysates/proteins at 20  $\mu$ g per lane.

#### Secondary

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

**Predicted band size:** 101 kDa

**Observed band size:** 101 kDa



Western blot - Anti-MetRS/MARS antibody [EPR9872] (ab180497)

**All lanes :** Anti-MetRS/MARS antibody [EPR9872] (ab180497) at 1/10000 dilution ((unpurified))

**Lane 1 :** HepG2 lysate

**Lane 2 :** HeLa lysate

**Lane 3 :** SW480 lysate

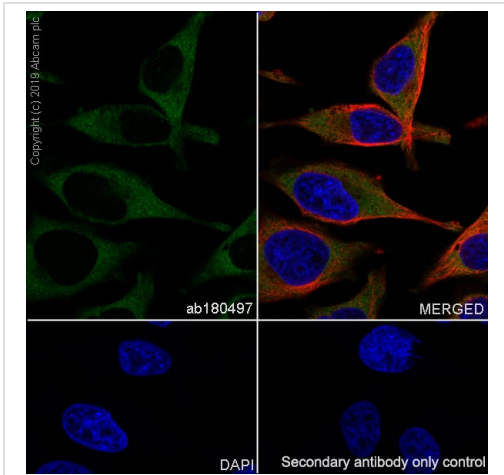
**Lane 4 :** Caco2 lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

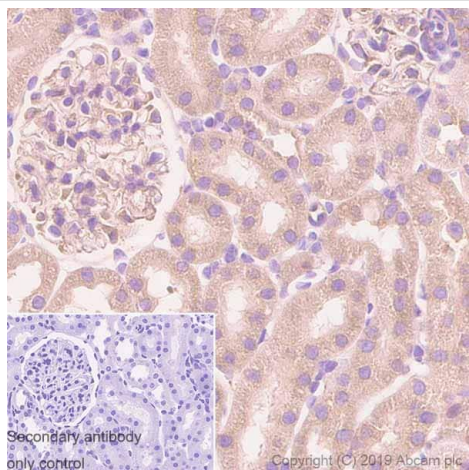
**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 101 kDa



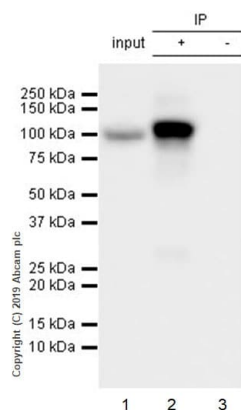
Immunocytochemistry/ Immunofluorescence - Anti-MetRS/MARS antibody [EPR9872] (ab180497)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling MetRS/MARS with purified ab180497 at 1/50 dilution (4.52 µg/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). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



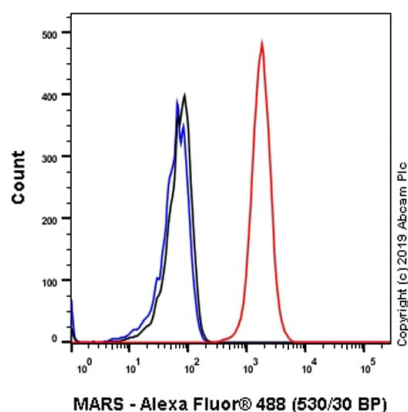
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MetRS/MARS antibody [EPR9872] (ab180497)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat kidney tissue sections labeling MetRS/MARS with purified ab180497 at 1/4000 dilution (0.06 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



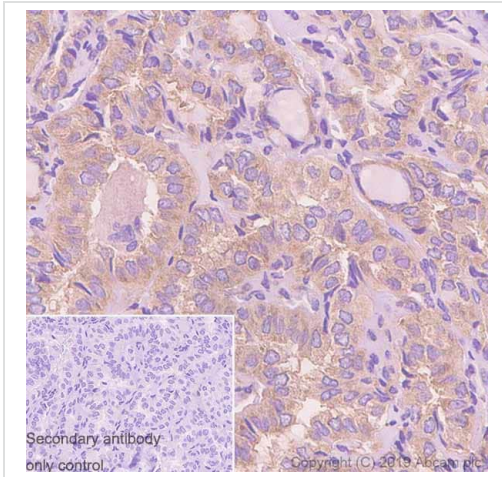
Immunoprecipitation - Anti-MetRS/MARS antibody [EPR9872] (ab180497)

ab180497 (purified) at 1/20 dilution (1 µg) immunoprecipitating MetRS/MARS in HepG2 whole cell lysate. Lane 1 (input): HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate 10 µg. Lane 2 (+): ab180497 & HepG2 whole cell lysate. Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab180497 in HepG2 whole cell lysate. For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used at 1/1000 dilution. Blocking and diluting buffer: 5% NFDm/TBST.



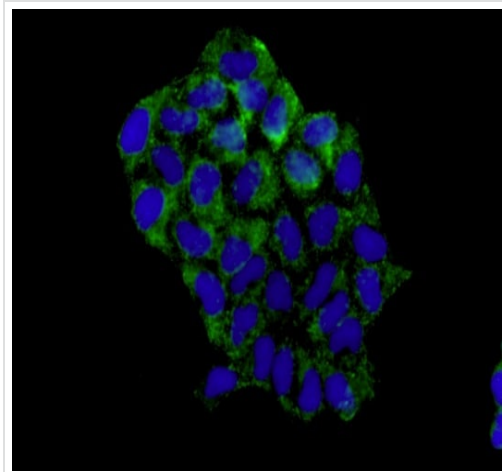
Flow Cytometry (Intracellular) - Anti-MetRS/MARS antibody [EPR9872] (ab180497)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling MetRS/MARS with purified ab180497 at 1/20 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



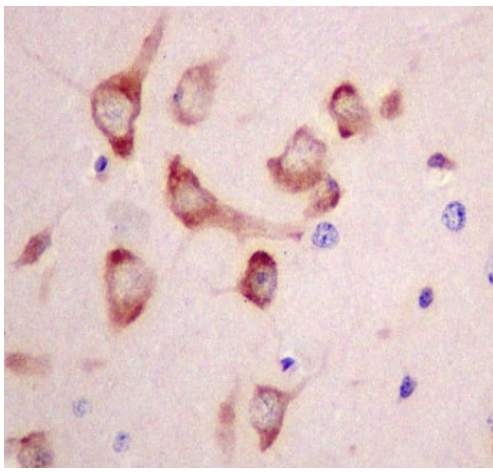
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human thyroid carcinoma tissue sections labeling MetRS/MARS with purified ab180497 at 1/4000 dilution (0.06 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MetRS/MARS antibody [EPR9872] (ab180497)



Immunofluorescent analysis of HeLa cells (acetone-fixed) labeling MARS with unpurified ab180497 at 1/250 dilution (green) followed by Goat anti rabbit IgG (Dylight 488) at 1/250 dilution and DAPI staining (blue).

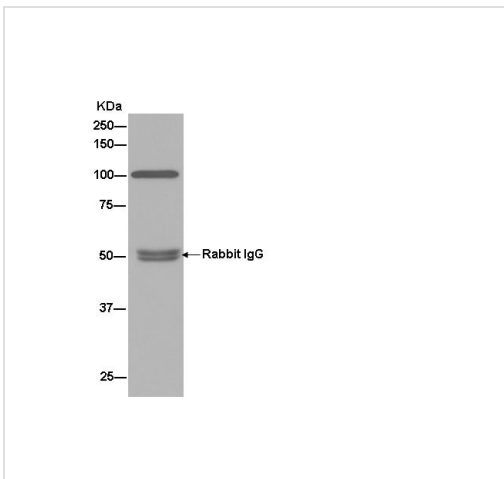
Immunocytochemistry/ Immunofluorescence - Anti-MetRS/MARS antibody [EPR9872] (ab180497)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MetRS/MARS antibody [EPR9872] (ab180497)

Immunohistochemical analysis of paraffin-embedded Human brain tissue labeling MARS with unpurified ab180497 at 1/50 dilution followed by ImmunoHistoprobe (Ready to use) HRP Polymer for Rabbit IgG secondary and counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-MetRS/MARS antibody [EPR9872] (ab180497)

Western blot analysis of immunoprecipitation pellet from HepG2 lysate immunoprecipitated using unpurified ab180497 at 1/40 dilution. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution.

Why choose a recombinant antibody?

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**Research with confidence**  
Consistent and reproducible results
- 

**Long-term and scalable supply**  
Recombinant technology
- 

**Success from the first experiment**  
Confirmed specificity
- 

**Ethical standards compliant**  
Animal-free production

Anti-MetRS/MARS antibody [EPR9872] (ab180497)

**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**

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- 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

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