


Product datasheet

# Anti-MRas antibody [EPR12457] ab176570

**KO VALIDATED** Recombinant RabMAb

5 Images

Overview

<b>Product name</b>	Anti-MRas antibody [EPR12457]
<b>Description</b>	Rabbit monoclonal [EPR12457] to MRas
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: mouse brain, rat brain; human brain; HeLa cells IP: human heart lysate
<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><b>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</b></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 long term. Avoid freeze / thaw cycle.
<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
<b>Clone number</b>	EPR12457
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab176570 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

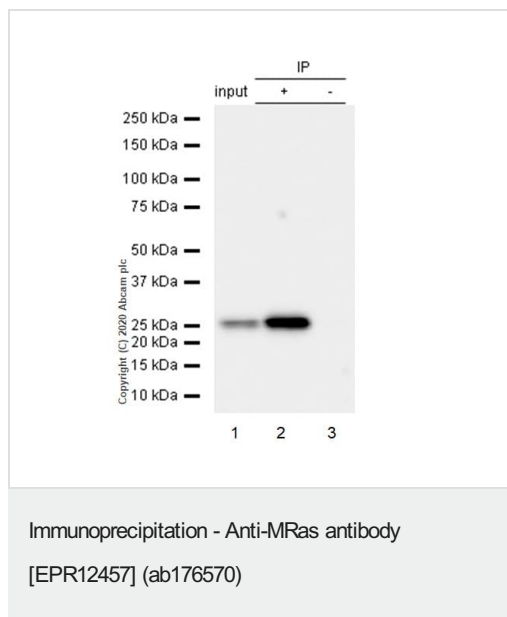
Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 24 kDa.
IP		1/10 - 1/100.

**Application notes** Is unsuitable for Flow Cyt, ICC/IF or IHC-P.

## Target

<b>Function</b>	May serve as an important signal transducer for a novel upstream stimuli in controlling cell proliferation. Weakly activates the MAP kinase pathway.
<b>Tissue specificity</b>	Expression highly restricted to the brain and heart.
<b>Sequence similarities</b>	Belongs to the small GTPase superfamily. Ras family.
<b>Cellular localization</b>	Cell membrane.

## Images



Purified ab176570 at 1/20 dilution (1 µg) immunoprecipitating MRas in Human heart lysate.

Lane 1 (input): Human heart lysate 10 µg

Lane 2 (+): ab176570 + Human heart lysate.

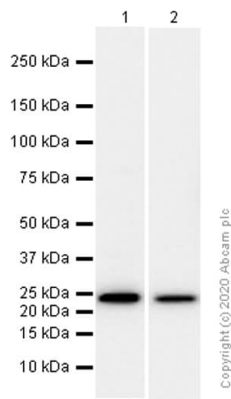
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab176570 in Human heart lysate.

VeriBlot for IP Detection Reagent (HRP) (**ab131366**) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm/TBST.

Observed band size: 24 kDa



Western blot - Anti-MRas antibody [EPR12457]  
(ab176570)

**Lane 1 :** Anti-MRas antibody [EPR12457] (ab176570) at 1/5000 dilution (Purified)

**Lane 2 :** Anti-MRas antibody [EPR12457] (ab176570) at 1/5000 dilution

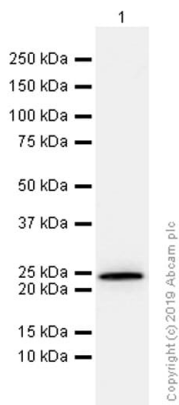
**Lane 1 :** Mouse brain lysate

**Lane 2 :** Rat brain lysate

**Secondary**

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

**Predicted band size:** 24 kDa



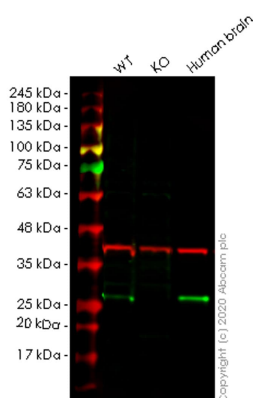
Western blot - Anti-MRas antibody [EPR12457]  
(ab176570)

Anti-MRas antibody [EPR12457] (ab176570) at 1/1000 dilution (Purified) + Human brain lysate

**Secondary**

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Predicted band size:** 24 kDa



Western blot - Anti-MRas antibody [EPR12457]  
(ab176570)

**All lanes :** Anti-MRas antibody [EPR12457] (ab176570) at 1/10000 dilution

**Lane 1 :** Wild-type HeLa cell lysate

**Lane 2 :** MRAS knockout HeLa cell lysate

**Lane 3 :** Human brain tissue lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes :** Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

**Predicted band size:** 24 kDa

**Observed band size:** 26 kDa

**Lanes 1-3:** Merged signal (red and green). Green - ab176570 observed at 26 kDa. Red - loading control **ab8245** observed at 36 kDa.

ab176570 Anti-MRas antibody [EPR12457] was shown to specifically react with MRas in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab265510** (knockout cell lysate **ab257541**) was used. Wild-type and MRas knockout samples were subjected to SDS-PAGE. ab176570 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated at room temperature for 2.5 hours at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

Why choose a recombinant antibody?



- 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-MRas antibody [EPR12457] (ab176570)

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

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