


## Product datasheet

# Anti-PHKA1 antibody [EPR12118] ab176338

**KO VALIDATED** Recombinant RabMAb<sup>®</sup>

[2 References](#) [5 Images](#)

### Overview

<b>Product name</b>	Anti-PHKA1 antibody [EPR12118]
<b>Description</b>	Rabbit monoclonal [EPR12118] to PHKA1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P <b>Unsuitable for:</b> ICC/IF or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide within Human PHKA1 aa 350-450 (Cysteine residue). The exact sequence is proprietary. Database link: <a href="#">P46020</a>
<b>Positive control</b>	A431, Jurkat, HeLa, and Human skeletal muscle lysates. Paraffin-embedded Human skeletal muscle tissue. Permeabilized Hela 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>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS
<b>Purity</b>	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR12118
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab176338 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

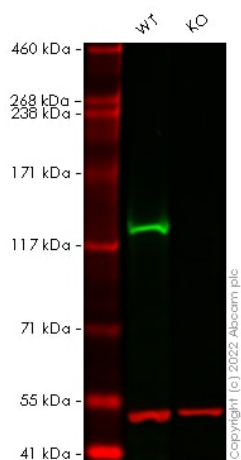
Application	Abreviews	Notes
<b>Flow Cyt (Intra)</b>		1/100 - 1/500. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
<b>WB</b>		1/1000 - 1/10000. Predicted molecular weight: 137 kDa.
<b>IHC-P</b>		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

**Application notes** Is unsuitable for ICC/IF or IP.

## Target

<b>Function</b>	Phosphorylase b kinase catalyzes the phosphorylation of serine in certain substrates, including troponin I. The alpha chain may bind calmodulin.
<b>Tissue specificity</b>	Muscle specific. Isoform 1 is predominant in vastus lateralis muscle. Isoform 2 predominates slightly in heart, and it predominates clearly in the other tissues tested.
<b>Pathway</b>	Glycan biosynthesis; glycogen metabolism.
<b>Involvement in disease</b>	Glycogen storage disease 9D (GSD9D) [MIM:300559]: A metabolic disorder characterized by slowly progressive, predominantly distal muscle weakness and atrophy. Clinical features include exercise intolerance with early fatigability, pain, cramps and occasionally myoglobinuria. Note=The disease is caused by mutations affecting the gene represented in this entry.
<b>Sequence similarities</b>	Belongs to the phosphorylase b kinase regulatory chain family.
<b>Post-translational modifications</b>	Although the final Cys may be farnesylated, the terminal tripeptide is probably not removed, and the C-terminus is not methylated.
<b>Cellular localization</b>	Cell membrane.

## Images



Western blot - Anti-PHKA1 antibody [EPR12118] (ab176338)

**All lanes** : Anti-PHKA1 antibody [EPR12118] (ab176338) at 1/1000 dilution

**Lane 1** : Wild-type HEK-293T cell lysate

**Lane 2** : PHKA1 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes** : Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution

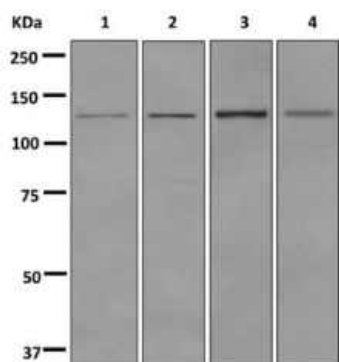
Performed under reducing conditions.

**Predicted band size:** 137 kDa

**Observed band size:** 130 kDa

False colour image of Western blot: Anti-PHKA1 antibody [EPR12118] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] (**ab7291**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab176338 was shown to bind specifically to PHKA1. A band was observed at 130 kDa in wild-type HEK-293T cell lysates with no signal observed at this size in PHKA1 knockout cell line **ab267337** (knockout cell lysate **ab258111**).

To generate this image, wild-type and PHKA1 knockout HEK-293T cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-PHKA1 antibody [EPR12118] (ab176338)

**All lanes** : Anti-PHKA1 antibody [EPR12118] (ab176338) at 1/1000 dilution

**Lane 1** : A431 cell lysate

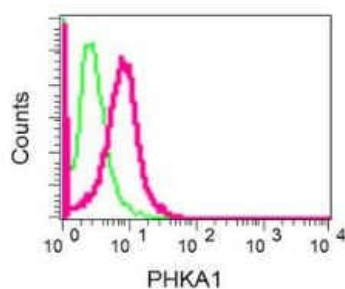
**Lane 2** : Jurkat cell lysate

**Lane 3** : HeLa cell lysate

**Lane 4** : Human skeletal muscle lysate

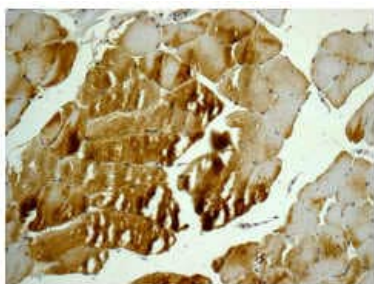
Lysates/proteins at 10 µg per lane.

**Predicted band size:** 137 kDa



Flow Cytometry (Intracellular) - Anti-PHKA1 antibody [EPR12118] (ab176338)

Intracellular flow cytometric analysis of permeabilized HeLa cells labeling PHKA1 with ab176338 at 1/10 dilution (red) or a rabbit IgG (negative) (green).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PHKA1 antibody [EPR12118] (ab176338)

Immunohistochemical analysis of paraffin-embedded Human skeletal muscle tissue labeling PHKA1 with ab176338 at 1/100 dilution.

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

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-PHKA1 antibody [EPR12118] (ab176338)

**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