

## Product datasheet

# Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683] ab133448

Recombinant RabMAb

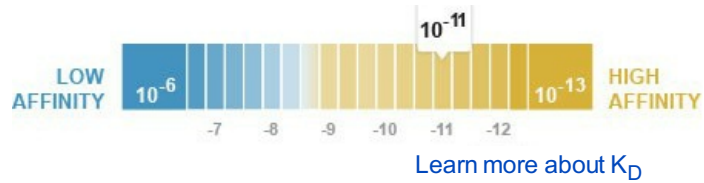
★★★★☆ 4 Abreviews 22 References 7 Images

### Overview

<b>Product name</b>	Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683]
<b>Description</b>	Rabbit monoclonal [EPR5683] to AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172)
<b>Host species</b>	Rabbit
<b>Specificity</b>	This antibody only detects AMPK alpha 1 phosphorylated at Threonine 183 and AMPK alpha 2 phosphorylated Threonine 172.
<b>Tested applications</b>	<b>Suitable for:</b> WB <b>Unsuitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human, Drosophila melanogaster
<b>Immunogen</b>	Synthetic peptide within Human AMPK alpha 1 (phospho T183). The exact sequence is proprietary. Also within AMPK alpha 2 (phospho T172). <a href="#">Run BLAST with ExPASy</a> <a href="#">Run BLAST with NCBI</a>
<b>Positive control</b>	WB: 293 cell lysate
<b>General notes</b>	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> .  <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>  This product is a <a href="#">recombinant rabbit monoclonal antibody</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. Avoid freeze / thaw cycle.
<b>Dissociation constant (K<sub>D</sub>)</b>	K <sub>D</sub> = 1.22 x 10 <sup>-11</sup> M



<b>Storage buffer</b>	pH: 7.40 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR5683
<b>Isotype</b>	IgG

### Applications

Our [Abpromise guarantee](#) covers the use of **ab133448** in the following tested applications.

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

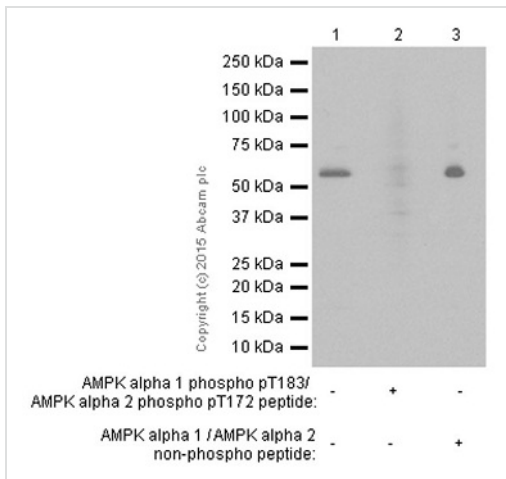
Application	Abreviews	Notes
WB	★★★★☆	1/1000 - 1/10000. Detects a band of approximately 62,63 kDa (predicted molecular weight: 64 kDa).

**Application notes**                      Is unsuitable for Flow Cyt.

### Target

**Cellular localization**                      AMPK alpha 2: Cytoplasm. Nucleus. In response to stress, recruited by p53/TP53 to specific promoters.

### Images



Western blot - Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683] (ab133448)

**All lanes :** Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683] (ab133448) at 1/2000 dilution

**Lane 1 :** HEK293 (human embryonic kidney) whole cell lysates

**Lane 2 :** HEK293 (human embryonic kidney) whole cell lysates plus AMPK alpha 1 phospho pT183 and AMPK alpha 2 phospho pT172 peptides

**Lane 3 :** HEK293 (human embryonic kidney) whole cell lysates plus AMPK alpha 1 and AMPK alpha 2 non-phospho peptides

Lysates/proteins at 10 µg per lane.

### Secondary

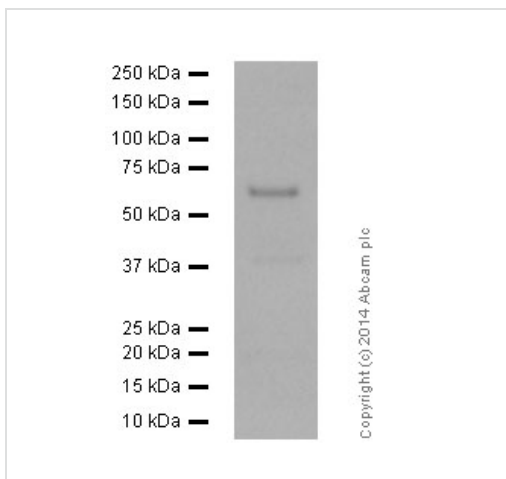
**All lanes :** Goat anti-rabbit IgG, (H+L), HRP conjugated (ab97051) at 1/20000 dilution

**Predicted band size:** 64 kDa

**Observed band size:** 64 kDa

**Exposure time:** 15 seconds

Blocking and dilution buffer: 5% NFDm/TBST



Western blot - Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683] (ab133448)

Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683] (ab133448) at 1/1000 dilution (purified) + Fruit fly lysate at 20 µg

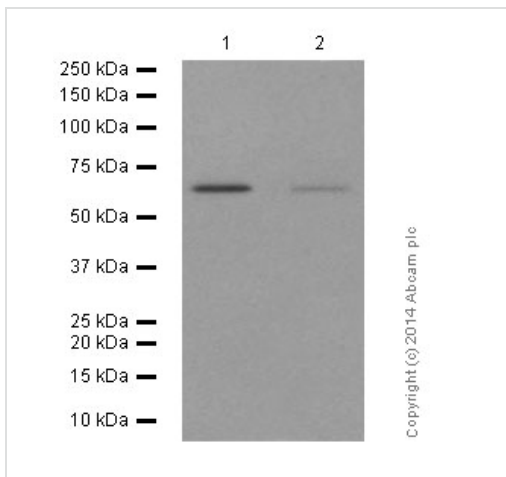
### Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/1000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 64 kDa

Blocking buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm /TBST.



Western blot - Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683] (ab133448)

**All lanes :** Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683] (ab133448) at 1/1000 dilution (purified)

**Lane 1 :** Mouse heart lysate

**Lane 2 :** Rat brain lysate

Lysates/proteins at 10 µg per lane.

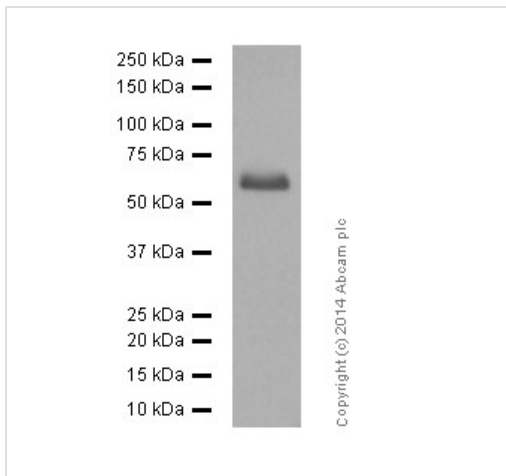
**Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/1000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 64 kDa

Blocking buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm /TBST.



Western blot - Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683] (ab133448)

Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683] (ab133448) at 1/1000 dilution (purified) + Molt-4 cell lysate at 20 µg

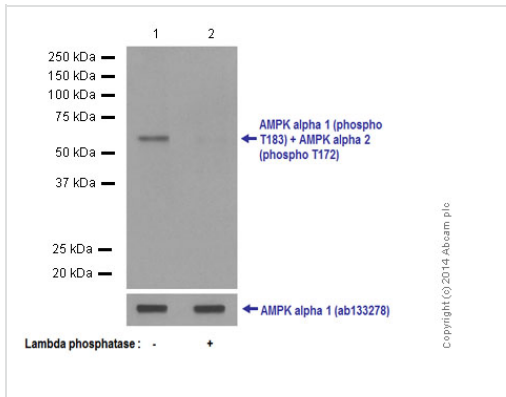
**Secondary**

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/1000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 64 kDa

Blocking buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm /TBST.



Western blot - Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683] (ab133448)

**All lanes :** Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683] (ab133448) at 1/1000 dilution (purified)

**Lane 1 :** Untreated HEK293 cell lysate

**Lane 2 :** HEK293 cell lysate treated with Lambda phosphatase

Lysates/proteins at 10 µg per lane.

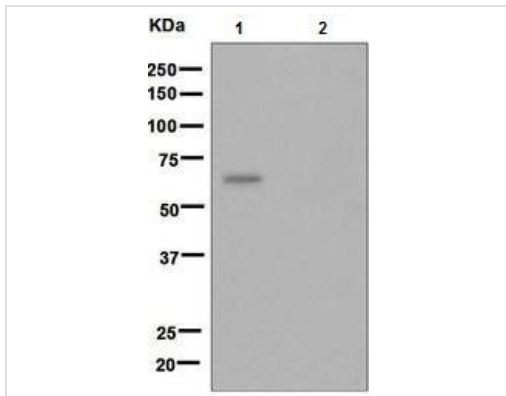
### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/1000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 64 kDa

Blocking buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm /TBST.



Western blot - Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683] (ab133448)

**All lanes :** Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683] (ab133448) at 1/1000 dilution (unpurified)

**Lane 1 :** 293 cell lysate

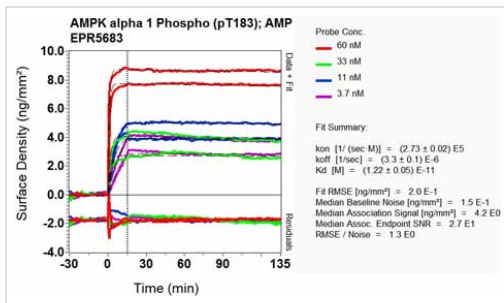
**Lane 2 :** Lysate of 293 cells treated with lambda phosphatase

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat anti-rabbit HRP conjugated antibody at 1/2000 dilution

**Predicted band size:** 64 kDa



Other - Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683] (ab133448)

Equilibrium dissociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

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