

## Product datasheet

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

Recombinant RabMAb

★★★★★ 5 Abreviews 125 References 8 Images

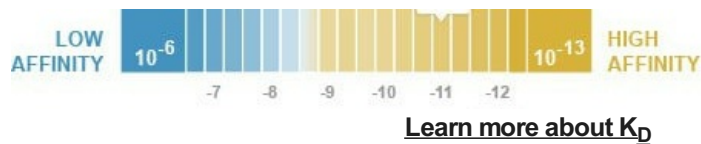
#### Overview

Product name	Anti-AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172) antibody [EPR5683]
Description	Rabbit monoclonal [EPR5683] to AMPK alpha 1 (phospho T183) + AMPK alpha 2 (phospho T172)
Host species	Rabbit
Specificity	This antibody only detects AMPK alpha 1 phosphorylated at Threonine 183 and AMPK alpha 2 phosphorylated Threonine 172.
Tested applications	<b>Suitable for:</b> WB <b>Unsuitable for:</b> Flow Cyt
Species reactivity	<b>Reacts with:</b> Mouse, Rat, Human, Drosophila melanogaster
Immunogen	Synthetic peptide within Human AMPK alpha 1 (phospho T183). The exact sequence is proprietary. Also within AMPK alpha 2 (phospho T172).
Positive control	WB: HEK-293 and MOLT-4 whole cell lysates; Mouse heart lysate; Rat brain lysate;
General notes	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

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Dissociation constant (K <sub>D</sub> )	K <sub>D</sub> = 1.22 x 10 <sup>-11</sup> M





<b>Storage buffer</b>	pH: 7.2 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

**The Abpromise guarantee** 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.

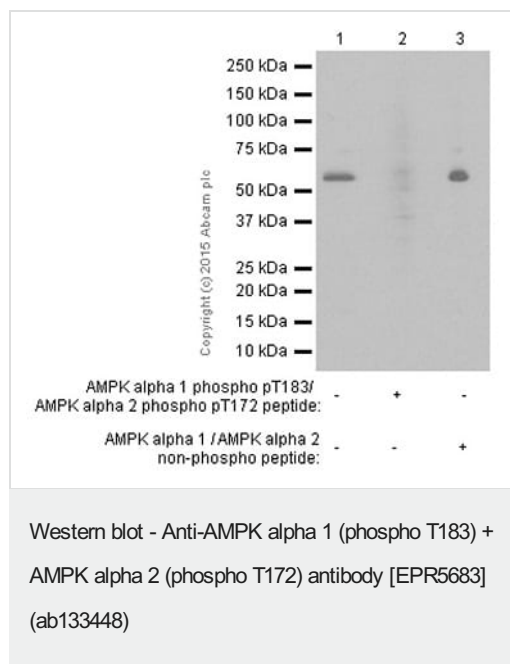
Application	Abreviews	Notes
WB	★★★★★ (4)	1/1000 - 1/10000. Detects a band of approximately 62,63 kDa (predicted molecular weight: 64 kDa).

**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



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

**Lane 1 :** HEK-293 (human embryonic kidney) whole cell lysates

**Lane 2 :** HEK-293 (human embryonic kidney) whole cell lysates plus AMPK alpha 1 phospho pT183 and AMPK alpha 2 phospho pT172 peptides

**Lane 3 :** HEK-293 (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

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

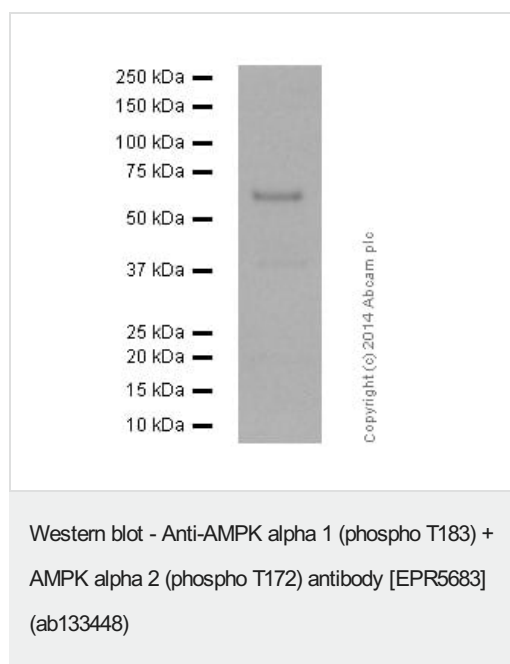
### Secondary

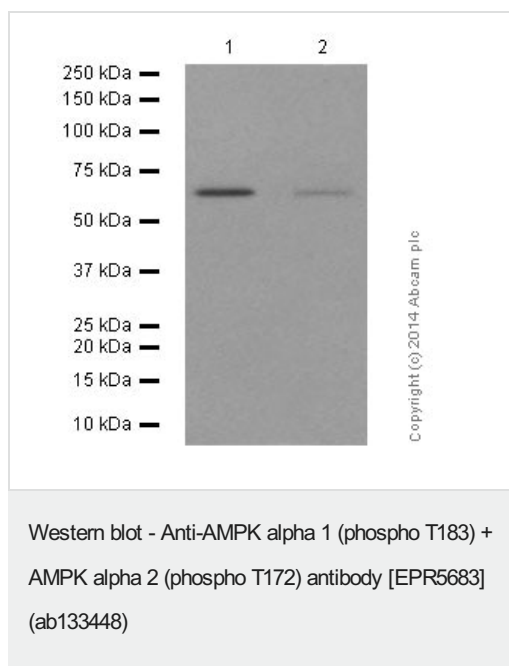
Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/1000 dilution  
(Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 64 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.





**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.

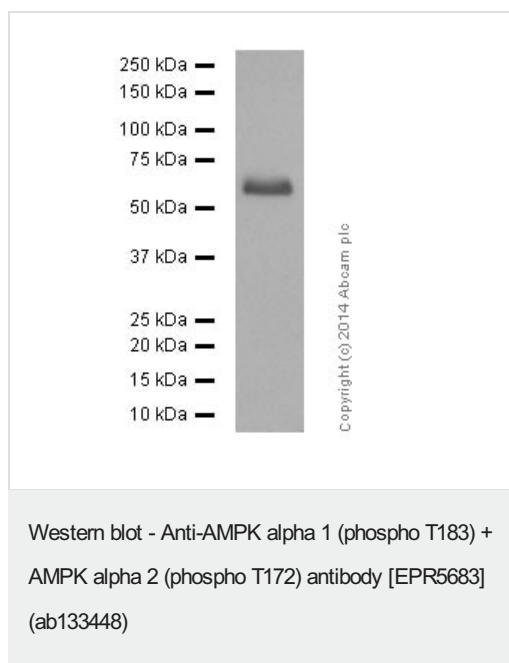
### Secondary

**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.



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

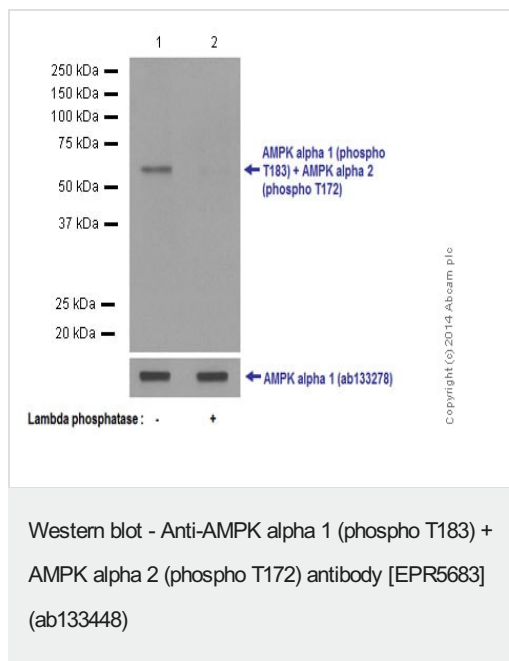
### Secondary

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.



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

**Lane 1 :** Untreated HEK-293 cell lysate

**Lane 2 :** HEK-293 cell lysate treated with Lambda phosphatase

Lysates/proteins at 10 µg per lane.

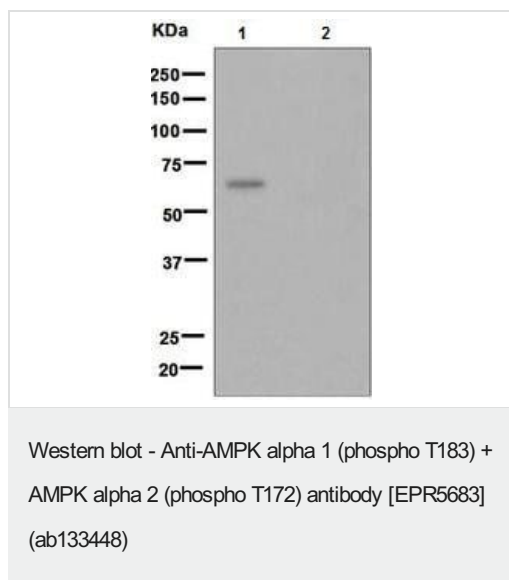
### Secondary

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

**Predicted band size:** 64 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



**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

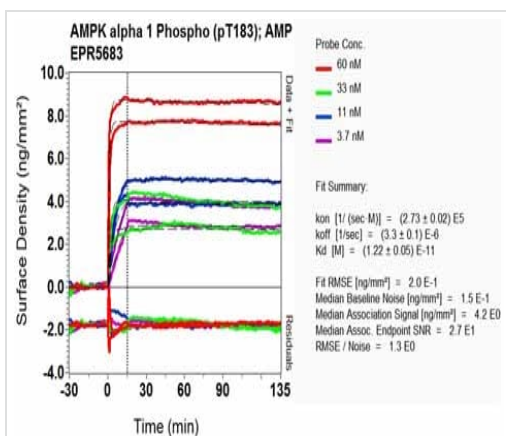
**Lane 2 :** Lysate of 293 cells treated with lambda phosphatase

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



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

Equilibrium disassociation constant ( $K_D$ )

Learn more about  $K_D$

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

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

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

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