

## Product datasheet

# Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] ab76299

Recombinant RabMAb

70 References 10 Images

### Overview

<b>Product name</b>	Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y]
<b>Description</b>	Rabbit monoclonal [EP197Y] to Erk1 (pT202/pY204) + Erk2 (pT185/pY187)
<b>Host species</b>	Rabbit
<b>Specificity</b>	This antibody detects Erk1 phosphorylated at Threonine 202 and Tyrosine 204 and Erk2 phosphorylated at Threonine 185 and Tyrosine 187.
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, Dot blot, ELISA <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: A431 (treated with EGF), SH-SY5Y (treated with NGF), PC-12 (treated with NGF), HeLa and NIH/3T3 whole cell lysates. IP: A431 (treated with EGF) and PC-12 (treated with NGF) whole cell lysates.
<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>

### 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>Storage buffer</b>	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>

<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EP197Y
<b>Isotype</b>	IgG

## Applications

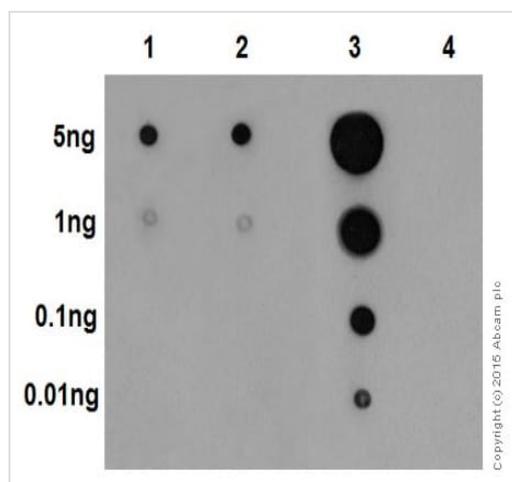
**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab76299 in the following tested applications.

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

Application	Abreviews	Notes
<b>WB</b>		1/5000 - 1/10000. Detects a band of approximately 43, 42 kDa (predicted molecular weight: 43, 41 kDa).
<b>IP</b>		1/80.
<b>Dot blot</b>		Use at an assay dependent concentration.
<b>ELISA</b>		Use at an assay dependent concentration.

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

## Images

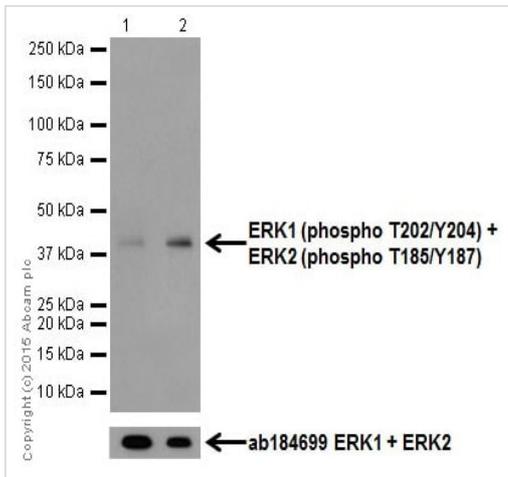


Dot Blot - Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] (ab76299)

Dot blot analysis of single phospho peptide pT202 (Lane 1), single phospho peptide pY204 (Lane 2), double phospho peptide pT202/pY204 (Lane 3) and non-phospho peptide (Lane 4) labelling Erk1 (pT202/pY204) + Erk2 (p185/pY187) with ab76299 at a dilution of 1/1000. A peroxidase-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody at a dilution of 1/1000.

Blocking and dilution buffer: 5% NFDm/TBST.

Exposure time: 3 minutes.



Western blot - Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] (ab76299)

**All lanes :** Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] (ab76299) at 1/5000 dilution

**Lane 1 :** A431 whole cell lysate - untreated

**Lane 2 :** A431 whole cell lysate - treated with 100ng/ml EGF for 10 minutes

Lysates/proteins at 10 µg per lane.

**Secondary**

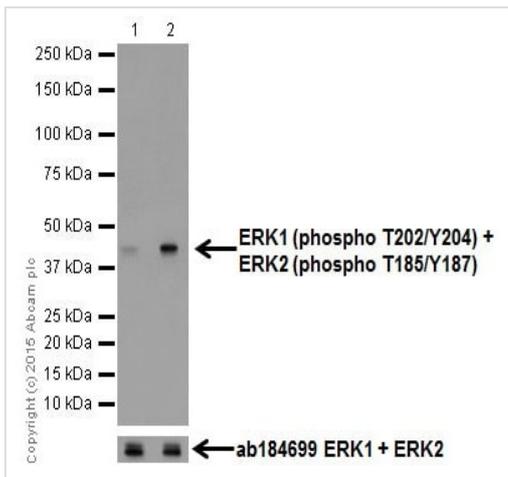
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

**Predicted band size:** 43, 41 kDa

**Observed band size:** 44 kDa

**Exposure time:** 3 minutes

Blocking and dilution buffer: 5% NFDm/TBST.



Western blot - Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] (ab76299)

**All lanes :** Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] (ab76299) at 1/10000 dilution

**Lane 1 :** SH-SY5Y whole cell lysate - untreated

**Lane 2 :** SH-SY5Y whole cell lysate - treated with 100ng/ml NGF for 10 minutes

Lysates/proteins at 10 µg per lane.

**Secondary**

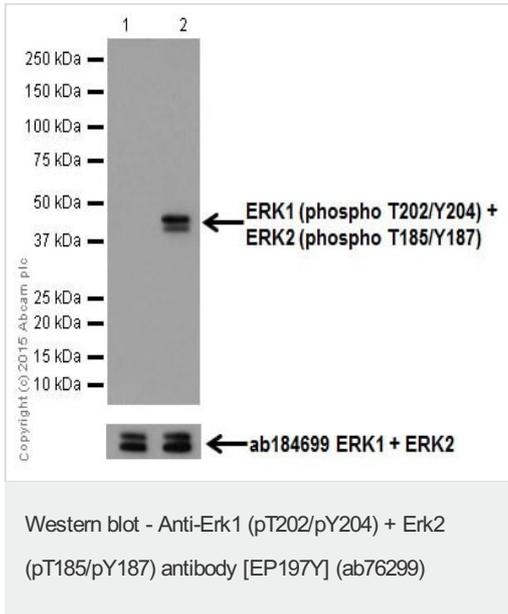
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

**Predicted band size:** 43, 41 kDa

**Observed band size:** 42,44 kDa

**Exposure time:** 15 seconds

Blocking and dilution buffer: 5% NFDM/TBST.



**All lanes :** Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] (ab76299) at 1/10000 dilution

**Lane 1 :** PC-12 whole cell lysate - untreated

**Lane 2 :** PC-12 whole cell lysate - treated with 100ng/ml NGF for 10 minutes

Lysates/proteins at 10 µg per lane.

#### Secondary

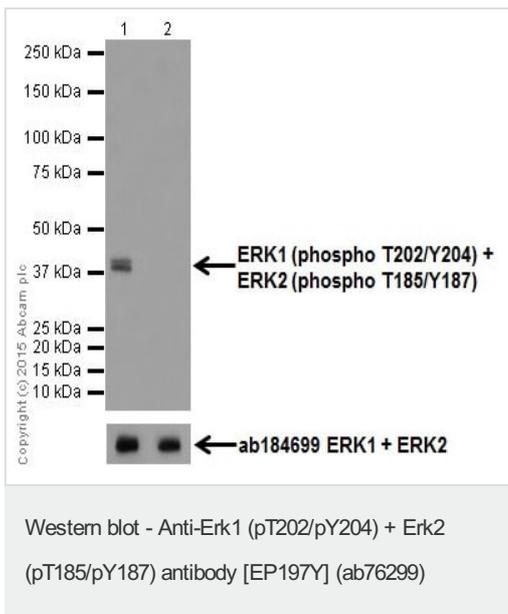
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

**Predicted band size:** 43, 41 kDa

**Observed band size:** 42,44 kDa

**Exposure time:** 15 seconds

Blocking and dilution buffer: 5% NFDM/TBST.



**All lanes :** Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] (ab76299) at 1/10000 dilution

**Lane 1 :** HeLa whole cell lysate - untreated

**Lane 2 :** HeLa whole 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 1/50000 dilution

**Predicted band size:** 43, 41 kDa

**Observed band size:** 42,44 kDa

**Exposure time:** 30 seconds

Blocking and dilution buffer: 5% NFDm/TBST.

Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] (ab76299) at 1/10000 dilution + NIH/3T3 whole cell lysate at 10 µg

### Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

**Predicted band size:** 43, 41 kDa

**Observed band size:** 42,44 kDa

**Exposure time:** 3 minutes

Blocking and dilution buffer: 5% NFDm/TBST.

ab76299 at 1/80 immunoprecipitating Erk1 (pT202/pY204) + Erk2 (pT185/pY187) in A431 whole cell lysate.

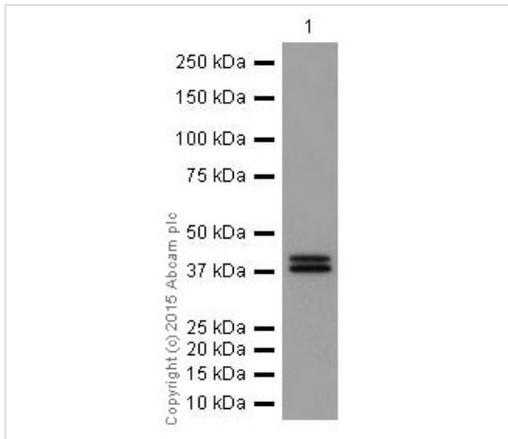
Lane 1 (input): A431 whole cell lysate - treated with 100ng/ml EGF for 10 min (10µg).

Lane 2 (+): ab76299 + A431 whole cell lysate - treated with 100ng/ml EGF for 10 min.

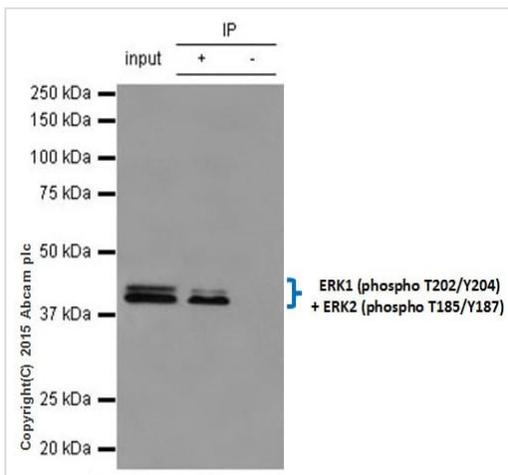
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab76299 in A431 whole cell lysate - treated with 100ng/ml EGF for 10 min.

For western blotting, ab76299 was used at a dilution of 1/1000 and a HRP-conjugated anti-rabbit IgG, specific to the non-reduced form of IgG, was used as the secondary antibody (1/1500).

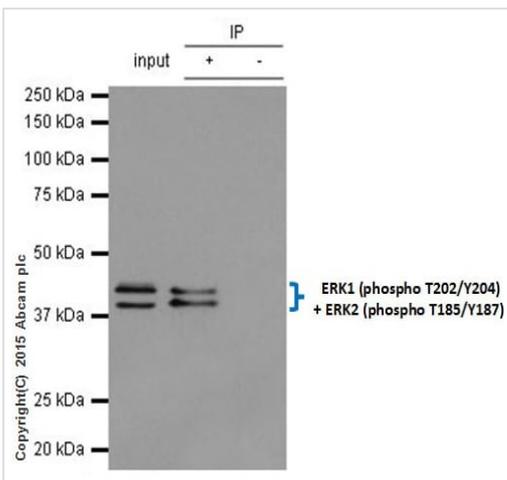
Blocking and dilution buffer: 5% NFDm/TBST.



Western blot - Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] (ab76299)



Immunoprecipitation - Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] (ab76299)



Immunoprecipitation - Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] (ab76299)

ab76299 at 1/80 immunoprecipitating Erk1 (pT202/pY204) + Erk2 (pT185/pY187) in PC-12 whole cell lysate.

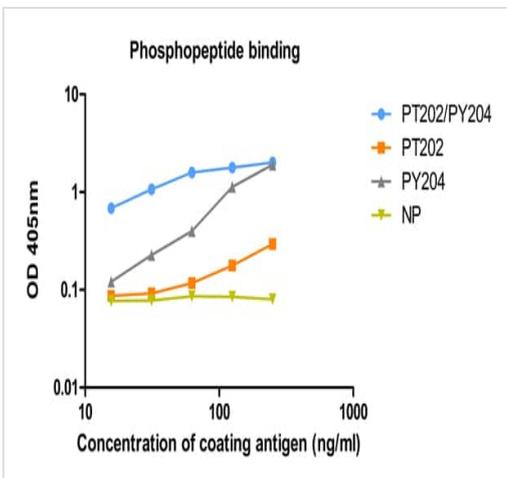
Lane 1 (input): PC-12 whole cell lysate - treated with 100ng/ml NGF for 10 min (10µg).

Lane 2 (+): ab76299 + PC-12 whole cell lysate - treated with 100ng/ml NGF for 10 min.

Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab76299 in PC-12 whole cell lysate - treated with 100ng/ml NGF for 10 min.

For western blotting, ab76299 was used at a dilution of 1/1000 and a HRP-conjugated anti-rabbit IgG, specific to the non-reduced form of IgG, was used as the secondary antibody (1/1500).

Blocking and dilution buffer: 5% NFDM/TBST.



ELISA - Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] (ab76299)

ELISA analysis of various phospho and non-phospho peptides (0-250 ng/ml) labelling Erk1 (pT202/pY204) + Erk2 (pT185/pY187) with ab76299 at a dilution of 1/1000. An Alkaline Phosphatase-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/2500).

ab76299 has stronger affinity for the double phospho peptide Y204/Y187 than to single phospho peptides T202 or Y204.

### 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-Erk1 (pT202/pY204) + Erk2 (pT185/pY187)  
antibody [EP197Y] (ab76299)

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

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