

# Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] - BSA and Azide free ab214171

Recombinant RabMAb

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

## Overview

<b>Product name</b>	Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [EP197Y] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EP197Y] to Erk1 (pT202/pY204) + Erk2 (pT185/pY187) - BSA and Azide free
<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>	ab214171 is the carrier-free version of <a href="#">ab76299</a> .

Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our [conjugation kits](#) for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply

- Animal-free production

For more information [see here](#).

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.20 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EP197Y
<b>Isotype</b>	IgG

## Applications

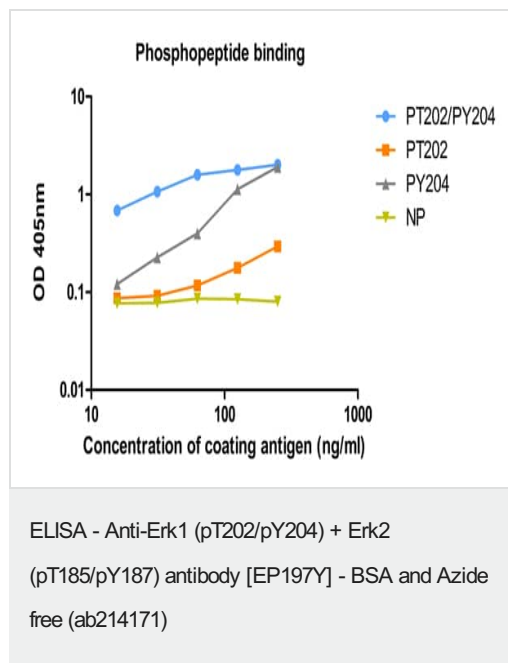
**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab214171 in the following tested applications.

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

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

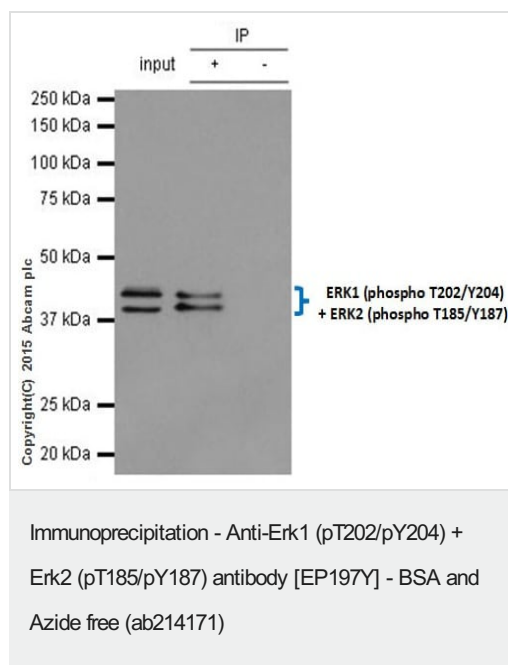
## Images



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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**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).

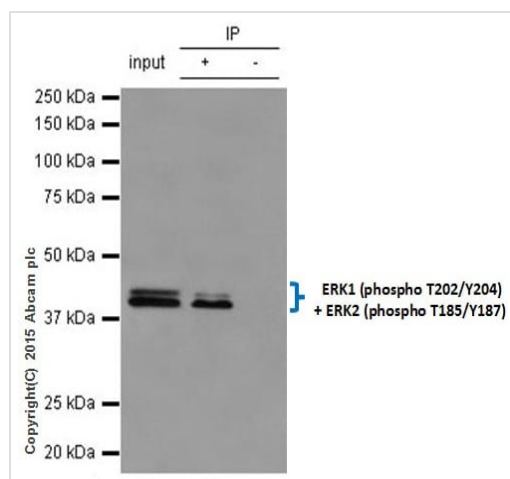
Lane 2 (+): **ab76299** + PC-12 whole cell lysate - treated with 100ng/ml NGF for 10 min.

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76299**).



Immunoprecipitation - Anti-Erk1 (pT202/pY204) +  
Erk2 (pT185/pY187) antibody [EP197Y] - BSA and  
Azide free (ab214171)

**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).

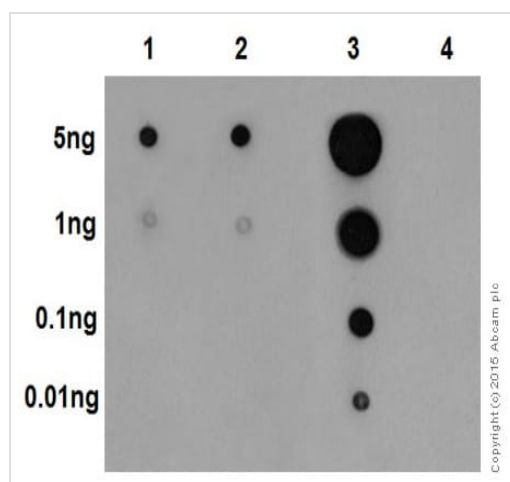
Lane 2 (+): **ab76299** + A431 whole cell lysate - treated with 100ng/ml EGF for 10 min.

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76299**).



Dot Blot - Anti-Erk1 (pT202/pY204) + Erk2  
(pT185/pY187) antibody [EP197Y] - BSA and Azide  
free (ab214171)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76299**).

### 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] - BSA and Azide free (ab214171)

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

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