

## Product datasheet

# Anti-PAR4 antibody [EPR3991] - BSA and Azide free ab247588

Recombinant RabMAb

3 Images

### Overview

<b>Product name</b>	Anti-PAR4 antibody [EPR3991] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR3991] to PAR4 - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IP, WB <b>Unsuitable for:</b> Flow Cyt, ICC or IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Synthetic peptide within Human PAR4 aa 1-100 (N terminal). The exact sequence is proprietary.
<b>General notes</b>	ab247588 is the carrier-free version of <a href="#">ab92590</a> This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.

Our [carrier-free formats](#) are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.

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.

Ab247588 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.

*Maxpar® is a trademark of Fluidigm Canada Inc.*

Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

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

Reproducibility is key to advancing scientific discovery and accelerating scientists' next

breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

## Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Affinity purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3991
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab247588** 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
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 37 kDa.
<b>Application notes</b>		Is unsuitable for Flow Cyt, ICC or IHC-P.

## Target

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## Function

Pro-apoptotic protein capable of selectively inducing apoptosis in cancer cells, sensitizing the cells to diverse apoptotic stimuli and causing regression of tumors in animal models. Induces apoptosis in certain cancer cells by activation of the Fas prodeath pathway and coparallel inhibition of NF-kappa-B transcriptional activity. Inhibits the transcriptional activation and augments the transcriptional repression mediated by WT1. Down-regulates the anti-apoptotic protein BCL2 via its interaction with WT1. Seems also to be a transcriptional repressor by itself. May be directly involved in regulating the amyloid precursor protein (APP) cleavage activity of BACE1.

## Tissue specificity

Widely expressed. Expression is elevated in various neurodegenerative diseases such as amyotrophic lateral sclerosis, Alzheimer, Parkinson and Huntington diseases and stroke. Down-regulated in several cancers.

## Domain

The leucine-zipper domain is not essential for apoptosis, but is required for sensitization of cells to exogenous apoptotic insults and for interaction with its partners.

The SAC domain is a death-inducing domain selective for apoptosis induction in cancer cells. This domain is essential for nuclear entry, Fas activation, inhibition of NF-kappa-B activity and induction of apoptosis in cancer cells.

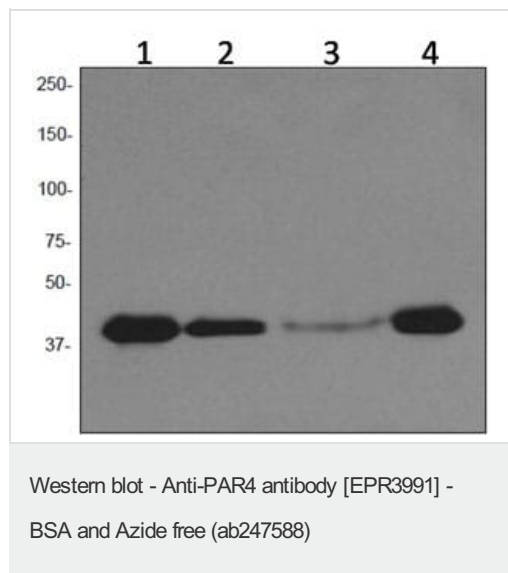
## Post-translational modifications

Preferentially phosphorylated at the Thr-163 by PKC in cancer cells.

## Cellular localization

Cytoplasm. Nucleus. Mainly cytoplasmic in absence of apoptosis signal and in normal cells. Nuclear in most cancer cell lines. Nuclear entry seems to be essential but not sufficient for apoptosis (By similarity). Nuclear localization includes nucleoplasm and PML nuclear bodies.

## Images



**All lanes** : Anti-PAR4 antibody [EPR3991] ([ab92590](#)) at 1/10000 dilution

**Lane 1** : LNCap cell lysate

**Lane 2** : Jurkat cell lysate

**Lane 3** : A549 cell lysate

**Lane 4** : HeLa cell lysate

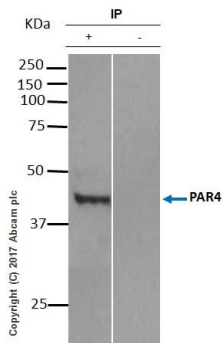
Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes** : HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 37 kDa

This data was developed using [ab92590](#), the same antibody clone in a different buffer formulation.



Immunoprecipitation - Anti-PAR4 antibody  
[EPR3991] - BSA and Azide free (ab247588)

This data was developed using [ab92590](#), the same antibody clone in a different buffer formulation.

[ab92590](#) at 1/40 immunoprecipitating PAR4 in Jurkat (human T cell leukemia T lymphocyte) whole cell lysate.

**Lane 1 (+):** [ab92590](#) + Jurkat whole cell lysate

**Lane 2 (-):** PBS instead of [ab92590](#) in Jurkat whole cell lysate

For western blotting, [ab92590](#) was at 1/1000 dilution followed by Goat Anti-Rabbit IgG, (HRP), specific to the non-reduced form of IgG as the secondary antibody (1/1500).

**Blocking and dilution buffer:** 5% NFD/MTBST.

### 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-PAR4 antibody [EPR3991] - BSA and Azide free (ab247588)

**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

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- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors