

## Product datasheet

# Anti-DGKZ/DGK-zeta antibody [EPR22040-72] - BSA and Azide free ab239792

Recombinant RabMAb

[7 Images](#)

### Overview

<b>Product name</b>	Anti-DGKZ/DGK-zeta antibody [EPR22040-72] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR22040-72] to DGKZ/DGK-zeta - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, Flow Cyt, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant fragment within Human DGKZ/DGK-zeta aa 700-1000. The exact sequence is proprietary. Database link: <a href="#">Q13574</a>
<b>Positive control</b>	IHC-P: Human tonsil tissue.
<b>General notes</b>	ab239792 is the carrier-free version of <a href="#">ab239080</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.

Ab239792 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.

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

Previously labelled as DGKZ.

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>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR22040-72
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab239792** 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		Use at an assay dependent concentration. Predicted molecular weight: 124 kDa.
IHC-P		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

## Target

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**Function** Displays a strong preference for 1,2-diacylglycerols over 1,3-diacylglycerols, but lacks substrate specificity among molecular species of long chain diacylglycerols. Isoform 2 but not isoform 1 regulates RASGRP1 activity.

**Tissue specificity** Highest levels in brain, and substantial levels in skeletal muscle, heart, and pancreas. Isoform 1 is

predominantly expressed in muscle.

### Sequence similarities

Belongs to the eukaryotic diacylglycerol kinase family.

Contains 2 ANK repeats.

Contains 1 DAGKc domain.

Contains 2 phorbol-ester/DAG-type zinc fingers.

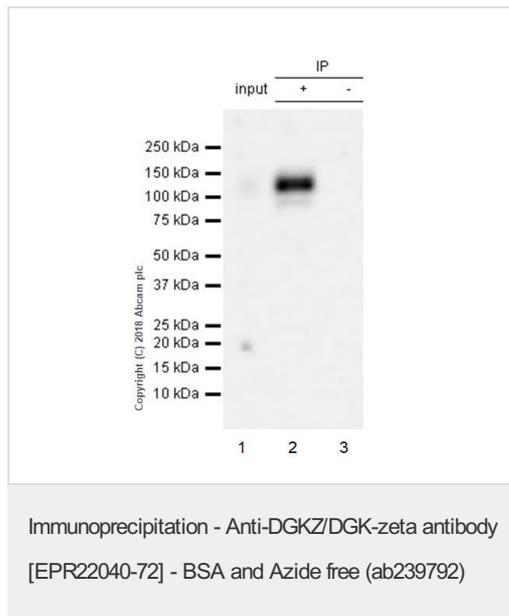
### Post-translational modifications

Phosphorylation of the MARCKS homology domain by PKC reduces nuclear accumulation of DGK-zeta.

### Cellular localization

Cytoplasm. Nucleus. Cell membrane.

## Images



DGKZ/DGK-zeta was immunoprecipitated from 0.35 mg of Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate with [ab239080](#) at 1/30 dilution. Western blot was performed from the immunoprecipitate using [ab239080](#) at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/1000 dilution.

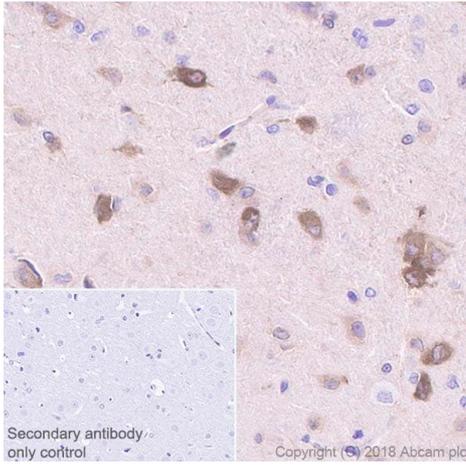
**Lane 1:** Jurkat whole cell lysate 10  $\mu$ g (input).

**Lane 2:** [ab239080](#) IP in Jurkat whole cell lysate.

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of [ab239080](#) in Jurkat whole cell lysate (-).

Blocking and dilution buffer and concentration: 5% NFD/MTBST.  
Exposure time: 15 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab239080](#)).

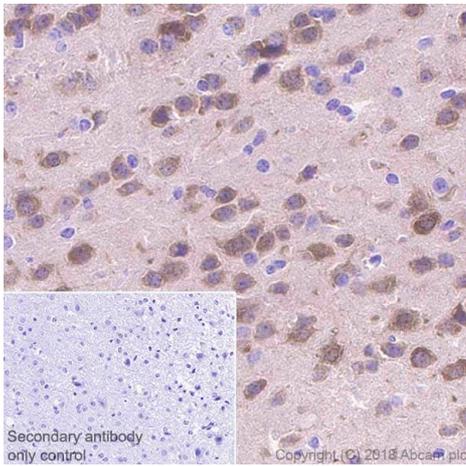


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DGKZ/DGK-zeta antibody [EPR22040-72] - BSA and Azide free (ab239792)

Immunohistochemical analysis of paraffin-embedded rat brain tissue labeling DGKZ/DGK-zeta with [ab239080](#) at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Cytoplasmic staining on neurons of rat brain (PMID: 14511325) (PMID: 24119575) is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab239080](#)).

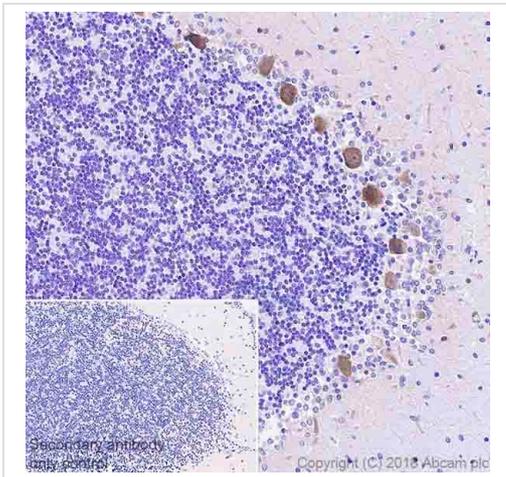


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DGKZ/DGK-zeta antibody [EPR22040-72] - BSA and Azide free (ab239792)

Immunohistochemical analysis of paraffin-embedded mouse brain tissue labeling DGKZ/DGK-zeta with [ab239080](#) at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Cytoplasmic and nuclear staining on neurons of mouse brain (PMID: 14511325) (PMID: 24119575) is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab239080](#)).

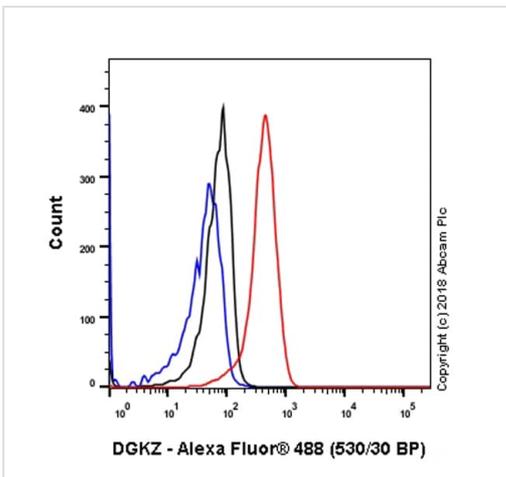


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DGKZ/DGK-zeta antibody [EPR22040-72] - BSA and Azide free (ab239792)

Immunohistochemical analysis of paraffin-embedded human cerebellum tissue labeling DGKZ/DGK-zeta with [ab239080](#) at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Cytoplasmic and nuclear staining on Purkinje cells of human cerebellum (PMID: 14511325) (PMID: 24119575) is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab239080](#)).

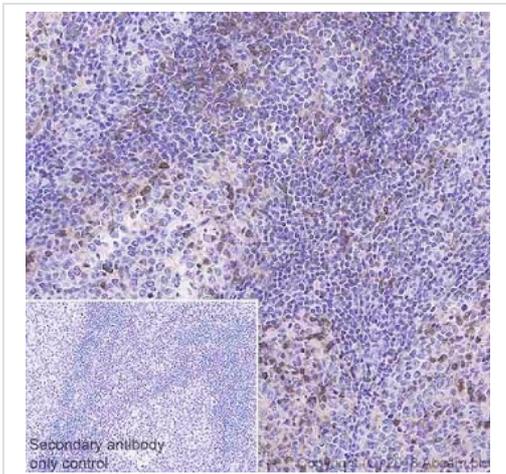


Flow Cytometry - Anti-DGKZ/DGK-zeta antibody [EPR22040-72] - BSA and Azide free (ab239792)

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol permeabilized Jurkat (human T cell leukemia cell line from peripheral blood) cell line labeling DGKZ/DGK-zeta with [ab239080](#) at 1/600 dilution (Red) compared with a Rabbit monoclonal IgG ([ab172730](#), Black) isotype control, and an unlabeled control (Cell without incubation with primary antibody and secondary antibody, Blue).

Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) at 1/2000 was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab239080](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DGKZ/DGK-zeta antibody [EPR22040-72] - BSA and Azide free (ab239792)

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling DGKZ/DGK-zeta with [ab239080](#) at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Cytoplasmic staining on subset of immune cells in human tonsil (PMID: 24573202) is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab239080](#)).

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-DGKZ/DGK-zeta antibody [EPR22040-72] - BSA and Azide free (ab239792)

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

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