

Product datasheet

Anti-CD69 antibody [EPR21814] ab233396

Recombinant RabMAb

★★★★★ 1 Abreviews 6 Images

Overview

Product name	Anti-CD69 antibody [EPR21814]
Description	Rabbit monoclonal [EPR21814] to CD69
Host species	Rabbit
Tested applications	Suitable for: IP, IHC-P, WB
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment within Human CD69 aa 1 to the C-terminus. The exact sequence is proprietary. Database link: Q07108
Positive control	WB: PMA (ab120297) treated Daudi whole cell lysate. HL-60, K562, U937 and H9 whole cell lysate. Human tonsil, lymphoma, thymus and colon tissue lysate. IP: PMA (ab120297) treated Daudi whole cell lysate. IHC-P: Human cervix cancer and tonsil tissue.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>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.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been "predicted to work</p>

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

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR21814
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab233396** 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		1/30.
IHC-P	★★★★★	1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000. Predicted molecular weight: 23 kDa.

Target

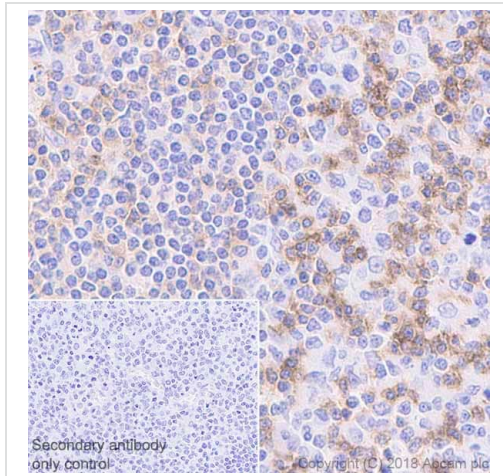
Function	Involved in lymphocyte proliferation and functions as a signal transmitting receptor in lymphocytes, natural killer (NK) cells, and platelets.
Tissue specificity	Expressed on the surface of activated T-cells, B-cells, natural killer cells, neutrophils, eosinophils, epidermal Langerhans cells and platelets.
Sequence similarities	Contains 1 C-type lectin domain.
Developmental stage	Earliest inducible cell surface glycoprotein acquired during lymphoid activation.
Post-translational	Constitutive Ser/Thr phosphorylation in both mature thymocytes and activated T-lymphocytes.

modifications

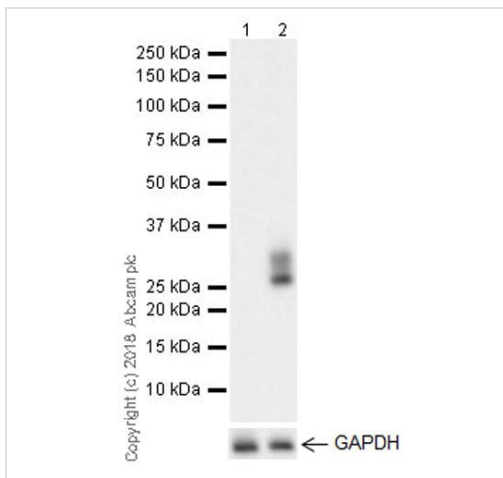
Cellular localization

Membrane.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD69 antibody [EPR21814] (ab233396)



Western blot - Anti-CD69 antibody [EPR21814] (ab233396)

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling CD69 with ab233396 at 1/500 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Membranous and cytoplasmic staining in lymphoid cells of human tonsil (PMID: 2807372) is observed. Counter stained with Hematoxylin.

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

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

All lanes : Anti-CD69 antibody [EPR21814] (ab233396) at 1/5000 dilution

Lane 1 : Un-treated Daudi (human Burkitt's lymphoma lymphoblast) whole cell lysate

Lane 2 : Daudi treated with 50 ng/ml phorbol-12-myristate-13-acetate (PMA, [ab120297](#)) for 24 hours

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 23 kDa

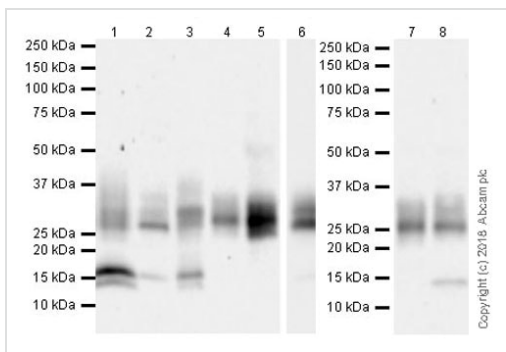
Observed band size: 28,32 kDa

[why is the actual band size different from the predicted?](#)

Exposure time: 92 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.

PMA treatment increases the basal level of p28/32 on Daudi. PMID: 1617156.



Western blot - Anti-CD69 antibody [EPR21814] (ab233396)

All lanes : Anti-CD69 antibody [EPR21814] (ab233396) at 1/1000 dilution

Lane 1 : HL-60 (human Acute Promyelocytic Leukemia promyeloblast) whole cell lysate at 20 μ g

Lane 2 : K562 (human chronic myelogenous leukemia lymphoblast) whole cell lysate at 20 μ g

Lane 3 : U937 (human histiocytic lymphoma monocyte) whole cell lysate at 20 μ g

Lane 4 : H9 (human lymphoma T lymphocyte) whole cell lysate at 10 μ g

Lane 5 : Human tonsil at 20 μ g

Lane 6 : Human lymphoma at 20 μ g

Lane 7 : Human thymus at 20 μ g

Lane 8 : Human colon at 20 μ g

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

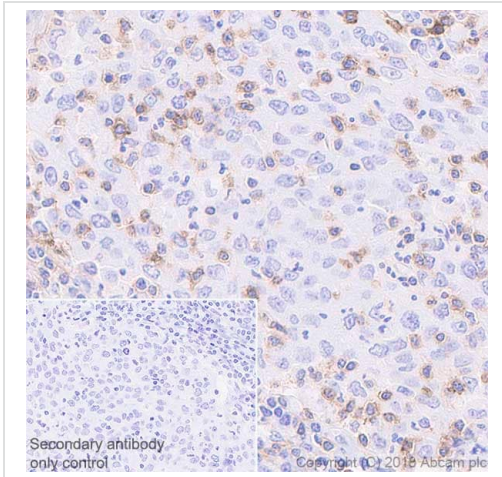
Predicted band size: 23 kDa

Observed band size: 24, 32 kDa [why is the actual band size different from the predicted?](#)

Blocking/Dilution buffer: 5% NFD/MTBST.

Exposure times: Lanes 1-5 and 7-8: 3 minutes; Lane 6: 26 seconds.

We observe an extra band at approximately 15 kDa that we do not yet have an explanation for; it could be non-specific.

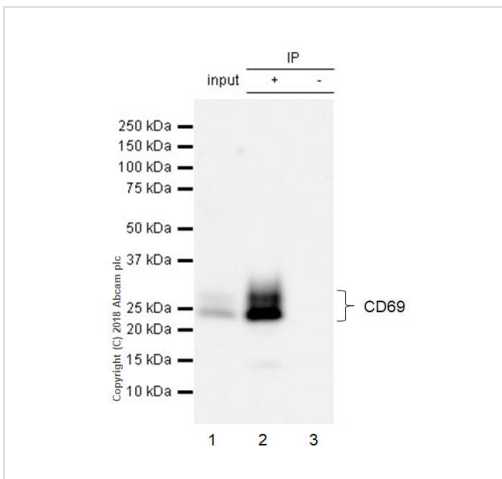


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD69 antibody [EPR21814] (ab233396)

Immunohistochemical analysis of paraffin-embedded human cervix cancer tissue labeling CD69 with ab233396 at 1/500 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Membranous and cytoplasmic staining in infiltrated lymphoid cells of human cervical cancer is observed. Counter stained with Hematoxylin.

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

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).



Immunoprecipitation - Anti-CD69 antibody [EPR21814] (ab233396)

CD69 was immunoprecipitated from 0.35 mg Daudi (human Burkitt's lymphoma lymphoblast) treated with 50 ng/ml phorbol-12-myristate-13-acetate (PMA, [ab120297](#)) for 24 hours whole cell lysate with ab233396 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab233396 at 1/5,000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/5,000 dilution.

Lane 1: Daudi (human Burkitt's lymphoma lymphoblast) treated with 50 ng/ml phorbol-12-myristate-13-acetate (PMA, [ab120297](#)) for 24 hours whole cell lysate 10 µg (Input).

Lane 2: ab233396 IP in Daudi treated with 50 ng/ml phorbol-12-myristate-13-acetate (PMA, [ab120297](#)) for 24 hours whole cell lysate (+).

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab233396 in Daudi treated with 50 ng/ml phorbol-12-myristate-13-acetate (PMA, [ab120297](#)) for 24 hours whole cell lysate (-).

Blocking/Dilution buffer: 5% NFDm/TBST.

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-CD69 antibody [EPR21814] (ab233396)

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

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