

Product datasheet

Anti-CD28 antibody [EPR22311-17] - BSA and Azide free ab242154

Recombinant RabMAb

3 Images

Overview

Product name	Anti-CD28 antibody [EPR22311-17] - BSA and Azide free
Description	Rabbit monoclonal [EPR22311-17] to CD28 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, IP Unsuitable for: Flow Cyt or ICC/IF
Species reactivity	Reacts with: Mouse
Immunogen	Recombinant fragment within Mouse CD28 aa 1-150. The exact sequence is proprietary. Database link: P31041
Positive control	IHC-P: Mouse spleen tissue. IP: EL4.IL-2 whole cell lysate.
General notes	<p>Ab242154 is the carrier-free version of ab242124. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.</p> <p>Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.</p> <p>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.</p> <p>ab242154 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. <i>Maxpar® is a trademark of Fluidigm Canada Inc.</i></p> <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</p>

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

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR22311-17
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab242154** 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: 25 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Perform heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 10 mins.
IP		Use at an assay dependent concentration.

Application notes

Is unsuitable for Flow Cyt or ICC/IF.

Target

Function

Involved in T-cell activation, the induction of cell proliferation and cytokine production and promotion of T-cell survival.

Tissue specificity

Expressed in T-cells and plasma cells, but not in less mature B-cells.

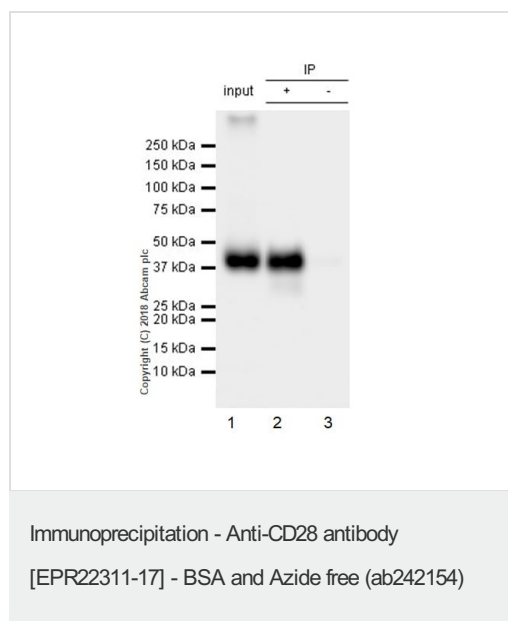
Sequence similarities

Contains 1 Ig-like V-type (immunoglobulin-like) domain.

Cellular localization

Membrane.

Images



CD28 was immunoprecipitated from 0.35 mg EL4.IL-2 (mouse lymphoma T lymphocyte) whole cell lysate with [ab242124](#) at 1/30 dilution. Western blot was performed on the immunoprecipitate using [ab242124](#) at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) was used for detection at 1/5000 dilution.

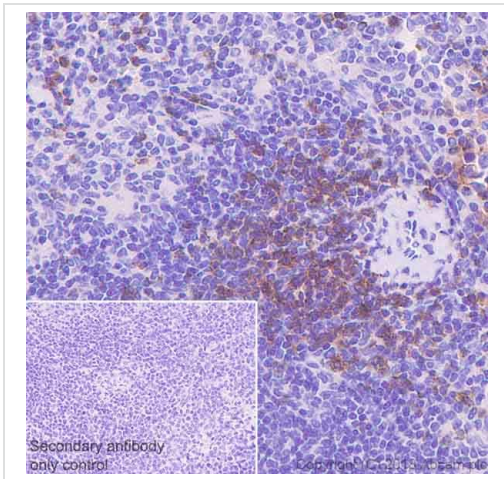
Lane 1: EL4.IL-2 whole cell lysate 10 µg (input).

Lane 2: [ab242124](#) IP in EL4.IL-2 whole cell lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of [ab242124](#) in EL4.IL-2 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.
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 ([ab242124](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD28 antibody [EPR22311-17] - BSA and Azide free (ab242154)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue stained for CD28 using [ab242124](#) at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining in periarterial lymphatic sheath of mouse spleen (PMID: 7489738). 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.

The section was incubated with [ab242124](#) for 30 mins at 37°C. Immunostaining was performed on a Leica Biosystems BOND® RX instrument.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (a242124).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Why choose a recombinant antibody?

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

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

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- We investigate all quality concerns to ensure our products perform to the highest standards

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