

Product datasheet

Anti-CD28 antibody [EPR22311-17] ab242124

Recombinant RabMAb

4 Images

Overview

Product name	Anti-CD28 antibody [EPR22311-17]
Description	Rabbit monoclonal [EPR22311-17] to CD28
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. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse thymus tissue lysate; EL4.IL-2 whole cell lysate. IHC-P: Mouse spleen tissue. IP: EL4.IL-2 whole cell lysate.
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>

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	EPR22311-17

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab242124 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		1/1000. Predicted molecular weight: 25 kDa.
IHC-P		1/500. 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		1/30.

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.

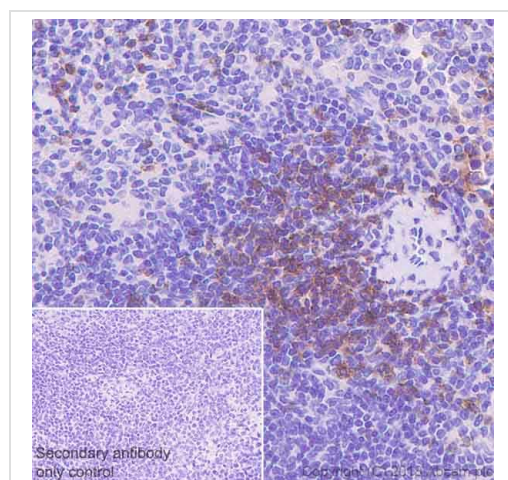
Sequence similarities

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

Cellular localization

Membrane.

Images



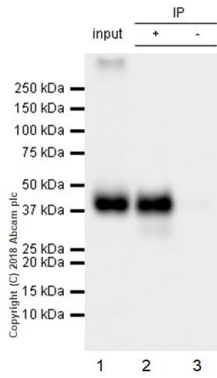
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD28 antibody [EPR22311-17] (ab242124)

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.

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



Immunoprecipitation - Anti-CD28 antibody [EPR22311-17] (ab242124)

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.

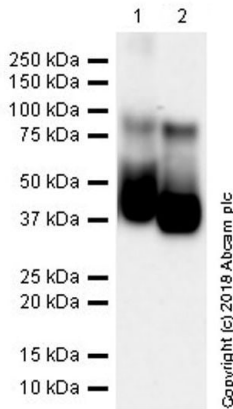
Lane 1: EL4.IL-2 whole cell lysate 10 µg (input).

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.



Western blot - Anti-CD28 antibody [EPR22311-17] (ab242124)

All lanes : Anti-CD28 antibody [EPR22311-17] (ab242124) at 1/1000 dilution

Lane 1 : Mouse thymus tissue lysate

Lane 2 : EL4.IL-2 (mouse lymphoma t lymphocyte) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

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

Predicted band size: 25 kDa

Observed band size: 40-50,80 kDa

Exposure time: 70 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.

Bands between 40-50 kDa are likely to be glycosylated forms (PMID: 7512728), whereas the 80 kDa band represents the dimer (PMID: 2157764).

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-CD28 antibody [EPR22311-17] (ab242124)

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

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