abcam

ab208514

Alexa Fluor® 555 Anti-CD3D antibody [EP4426]

Anti-CD3D antibody [EP4426] - Alexa Fluor® 555 conjugated (ab208514) is a rabbit recombinant monoclonal antibody detecting CD3D in **IHC-P, ICC/IF**. Suitable for **Human**.

- Biophysical QC for unrivalled batch-batch consistency

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 555
Excitation/Emission	Ex: 555nm, Em: 565nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EP4426
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	This product gave a positive signal in Jurkat cells fixed with 4% formaldehyde (10 min) and 80% methanol (5 min).

Flow Cyt

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information CD3D

Function

Part of the TCR-CD3 complex present on T-lymphocyte cell surface that plays an essential role in adaptive immune response. When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR-mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E, CD3G and CD247/CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain. Upon TCR engagement, these motifs become phosphorylated by Src family protein tyrosine kinases LCK and FYN, resulting in the activation of downstream signaling pathways (PubMed:2470098). In addition of this role of signal transduction in T-cell activation, CD3D plays an essential role in thymocyte differentiation. Indeed, participates in correct intracellular TCR-CD3 complex assembly and surface expression. In absence of a functional TCR-CD3 complex, thymocytes are unable to differentiate properly. Interacts with CD4 and CD8 and thus serves to establish a functional link between the TCR and coreceptors CD4 and CD8, which is needed for activation and positive selection of CD4 or CD8 T-cells (PubMed:12215456).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle, Store in the dark

Notes

What is this antibody validated in?
Alexa Fluor® 555 Anti-CD3D antibody [EP4426] (ab208514) is a rabbit recombinant monoclonal antibody and is validated for use in Immunohistochemistry (IHC-P), Immunocytochemistry/immunofluorescence (ICC/IF) in Human samples.

Related products
Antibody clone EP4426 is also available pre-conjugated to a variety of labels for your convenience – Anti-CD3D Alexa Fluor® 555 [EP4426] (ab208514).

Other related products
We have a range of other formats of antibody clone [EP4426] also available for your convenience: ab109531, Alexa Fluor® 488 - ab198935, Alexa Fluor® 647 - ab198937, Alexa Fluor® 555 - ab208514, Carrier free - ab215040, Carrier free - ab226073, PE - ab303184, APC - ab303185, HRP - ab303186, Alexa Fluor® 680 - ab307268, Alkaline Phosphatase - ab308900

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

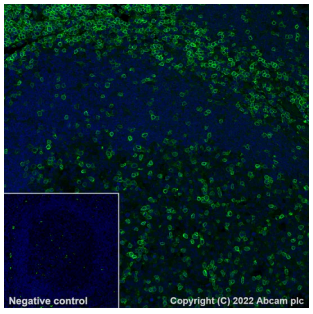
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

---

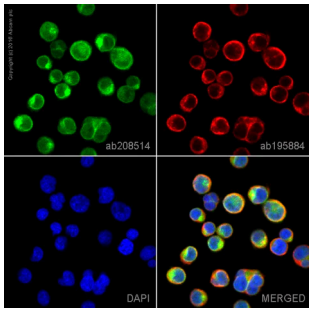
2 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 555 Anti-CD3D antibody [EP4426] (ab208514)

CD3D Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human tonsil tissue using rabbit Anti-CD3D antibody

Immunohistochemistry analysis of paraffin-embedded human tonsil tissue sections labelling CD3D with ab208514 at 1/100 dilution. The section was incubated with ab208514 for 60 mins at room temperature (shown in green). Nuclear DNA was labeled with DAPI (shown in blue). Antigen retrieval was heat mediated with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 40 minutes. Membrane staining on immune cells in human tonsil tissue. The section was then mounted using Fluoromount®. The immunostaining was performed on a Leica Biosystems BOND RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 555 Anti-CD3D antibody [EP4426] (ab208514)

CD3D Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CD3D antibody

ab208514 staining CD3 in Jurkat cells. The cells were fixed with 4% formaldehyde (10 min) and then incubated in 1%BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated overnight at +4°C with ab208514 at 1/100 dilution (**pseudocolored in green**) and ab195884, Rat monoclonal to Tubulin (Alexa Fluor® 647), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This product also gave a positive signal under the same testing conditions in Jurkat cells fixed with 80% methanol (5 min).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.