

Product datasheet

Anti-CD7 antibody [EPR4242] ab109296

Recombinant RabMAb

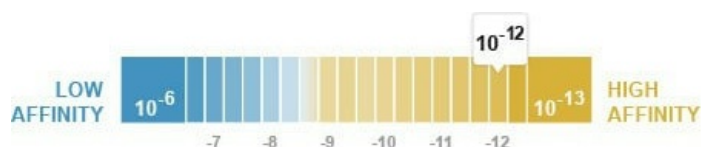
[2 References](#) [11 Images](#)

Overview

Product name	Anti-CD7 antibody [EPR4242]
Description	Rabbit monoclonal [EPR4242] to CD7
Host species	Rabbit
Specificity	The mouse and rat recommendation is based on the IHC-P results. We do not guarantee WB for mouse and rat.
Tested applications	Suitable for: WB, Flow Cyt (Intra), ICC/IF, IP, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Flow Cyt (intra): Jurkat cells; IP: Human spleen lysate; ICC/IF: Jurkat cells; IHC-P: Rat and mouse spleen tissues. Human colon carcinoma and tonsil tissues; WB: Human spleen 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.
Dissociation constant (K_D)	K _D = 2.40 x 10 ⁻¹² M



[Learn more about K_D](#)

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4242
Isotype	IgG

Applications

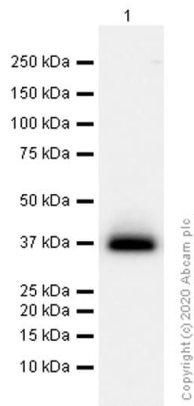
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab109296 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 25 kDa.
Flow Cyt (Intra)		1/100.
ICC/IF		1/50. For unpurified use at 1/100 - 1/250.
IP		1/10 - 1/100.
IHC-P		1/8000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <u>IHC antigen retrieval protocols</u> . For unpurified use at 1/1600.

Target

Function	Not yet known.
Sequence similarities	Contains 1 Ig-like (immunoglobulin-like) domain.
Cellular localization	Membrane.

Images



Western blot - Anti-CD7 antibody [EPR4242]
(ab109296)

Anti-CD7 antibody [EPR4242] (ab109296) at 1/10000 dilution +
Human Spleen Lysate at 15 µg

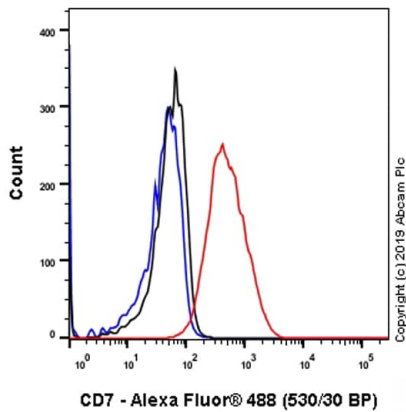
Secondary

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with
human IgG at 1/2000 dilution

Predicted band size: 25 kDa

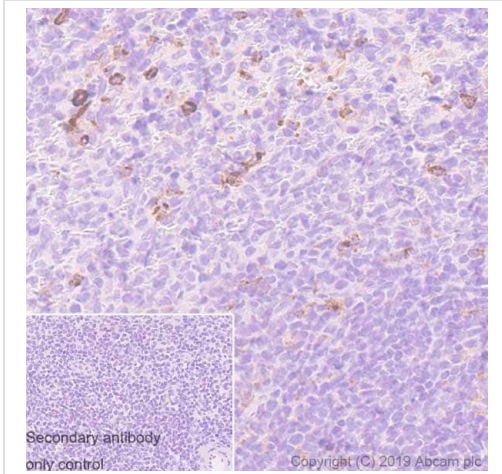
Observed band size: 37 kDa

The molecular mass observed is consistent with what has been
described in the literatures (PMID: 24157461, 2479685).



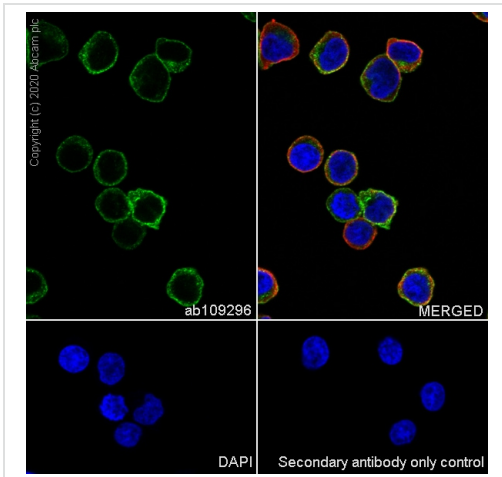
Flow Cytometry (Intracellular) - Anti-CD7 antibody
[EPR4242] (ab109296)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed
90% methanol permeabilized Jurkat (Human T cell leukemia T
lymphocyte) cells labelling CD7 with purified ab109296 at 1/100
dilution (1µg) (Red) compared with a Rabbit monoclonal IgG
(**ab172730**) (Black) isotype control and an unlabelled control (cells
without incubation with primary antibody and secondary antibody)
(Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at
1/2000 dilution was used as the secondary antibody.



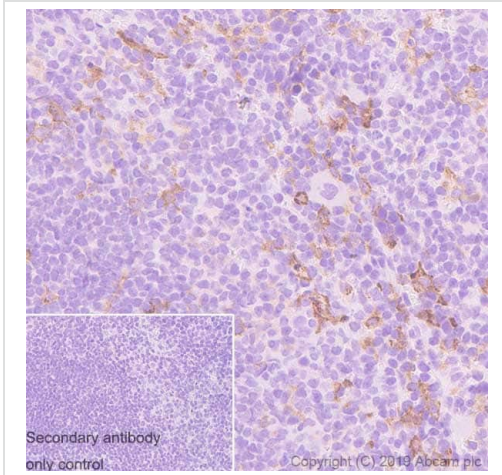
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat spleen tissue sections labeling CD7 with Purified ab109296 at 1/8000 dilution (0.07 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD7 antibody [EPR4242] (ab109296)



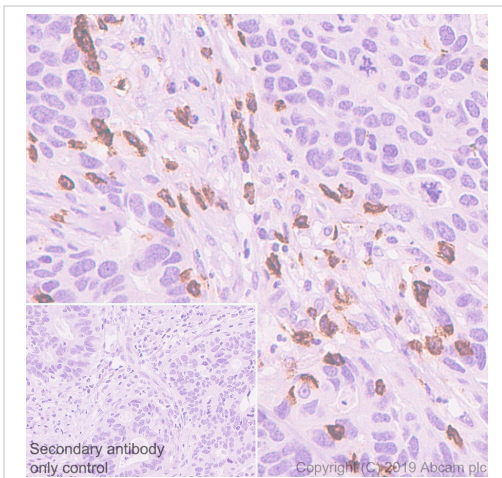
Immunocytochemistry analysis of Jurkat (Human T cell leukemia T lymphocyte) cells labeling CD7 with Purified ab109296 at 1/50 dilution (10 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 dilution (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 dilution (2 µg/mL). DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

Immunocytochemistry/ Immunofluorescence - Anti-CD7 antibody [EPR4242] (ab109296)



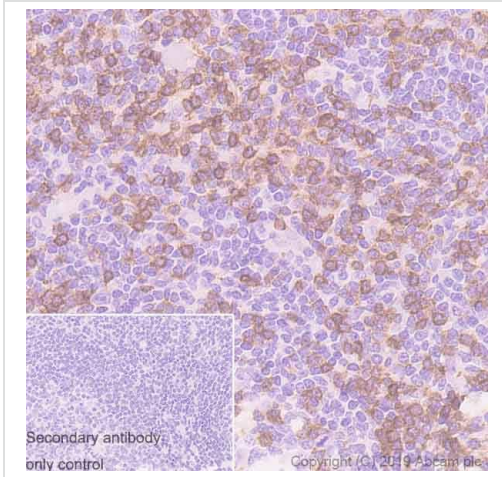
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse spleen tissue sections labeling CD7 with Purified ab109296 at 1/8000 dilution (0.07 $\mu\text{g}/\text{mL}$). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD7 antibody [EPR4242] (ab109296)



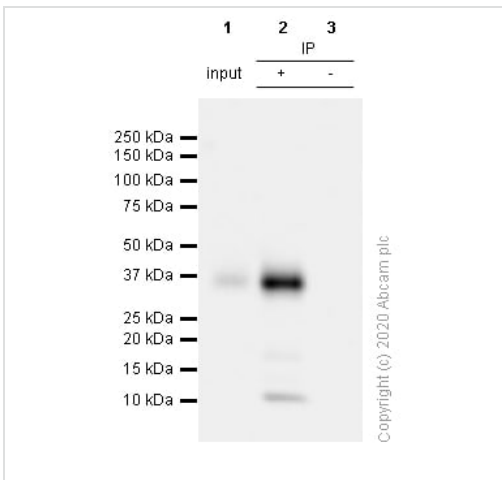
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon carcinoma tissue sections labeling CD7 with Purified ab109296 at 1/8000 dilution (0.07 $\mu\text{g}/\text{mL}$). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD7 antibody [EPR4242] (ab109296)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD7 antibody [EPR4242] (ab109296)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue sections labeling CD7 with Purified ab109296 at 1/8000 dilution (0.07 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunoprecipitation - Anti-CD7 antibody [EPR4242] (ab109296)

Purified **ab131366** at 1/50 dilution immunoprecipitating CD7 in Human spleen whole cell lysate.

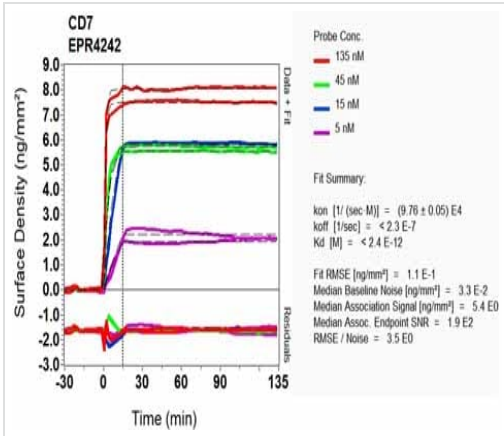
Lane 1 (input): Human spleen lysate 10 µg

Lane 2 (+): Human spleen lysate

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab109296 in Human spleen lysate

For western blotting, **ab227648** at 1/1000 dilution (0.45 µg/ml) and VeriBlot for IP Detection Reagent (HRP)(**ab131366**) at 1/50000 dilution were used.

Blocking and diluting buffer: 5% NFDM /TBST.



OI-RD Scanning - Anti-CD7 antibody [EPR4242]
(ab109296)

Equilibrium disassociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

Tissue Microarray (TMA) data for ab109296			
Normal tissue samples		Malignant tissue samples	
Human cardiac muscle	x	Human placenta	x (Immune cells ✓)
Human cerebrum	x	Human skeletal muscle	x
Human colon	x (Immune cells ✓)	Human skin	x (Immune cells ✓)
Human endometrium	x (Immune cells ✓)	Human spleen	✓
Human kidney	x (Immune cells ✓)	Human stomach	x (Immune cells ✓)
Human liver	x (Immune cells ✓)	Human testis	x
Human lung	x (Immune cells ✓)	Human thyroid	x (Immune cells ✓)
Human mammary gland	x (Immune cells ✓)	Human tonsil	✓
Human pancreas	x (Immune cells ✓)		
		Clear cell carcinoma of human kidney	x (Immune cells ✓)
		Human astrocytoma	x
		Human bladder cancer	x (Immune cells ✓)
		Human breast carcinoma	x (Immune cells ✓)
		Human cervical carcinoma	x (Immune cells ✓)
		Human colon carcinoma	x (Immune cells ✓)
		Human endometrial carcinoma	x (Immune cells ✓)
		Human gastric adenocarcinoma	x (Immune cells ✓)
		Human hepatocellular carcinoma	x (Immune cells ✓)
		Human lung carcinoma	x (Immune cells ✓)
		Human ovarian carcinoma	x (Immune cells ✓)
		Human pancreatic carcinoma	x (Immune cells ✓)
		Human prostatic hyperplasia	x (Immune cells ✓)
		Human thyroid carcinoma	x (Immune cells ✓)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD7 antibody [EPR4242]
(ab109296)

Tissue Microarrays stained for "Anti-CD7 antibody [EPR4242]" using "ab109296" in immunohistochemical analysis. This table provides a detailed overview of positive (tick mark) and negative (cross mark) staining per sample type tested. The sections were pre-treated using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) for 20 minutes. The sections were incubated with ab109296 for 30 mins at room temperature followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

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-CD7 antibody [EPR4242] (ab109296)

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

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