abcam

Product datasheet

Anti-CD7 antibody [EPR4242] - BSA and Azide free ab230834

Recombinant RabMAb

2 Abreviews 11 Images

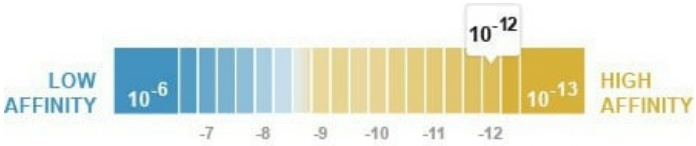
Overview

Product name	Anti-CD7 antibody [EPR4242] - BSA and Azide free
Description	Rabbit monoclonal [EPR4242] to CD7 - BSA and Azide free
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:** ICC/IF, Flow Cyt (Intra), WB, 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	ab230834 is the carrier-free version of **ab109296**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. 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. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**.

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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Dissociation constant (K_D)	$K_D = 2.40 \times 10^{-12}$ M



Learn more about K_D

Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4242
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab230834 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

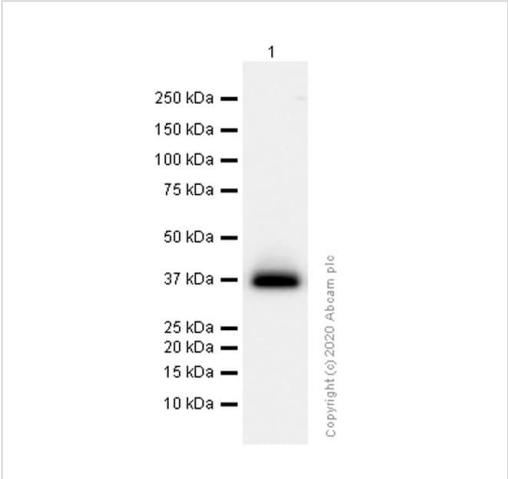
Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 37 kDa (predicted molecular weight: 25 kDa).
IP		Use at an assay dependent concentration.
IHC-P	★★★★★ (1)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.

Target

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

Cellular localization Membrane.

Images



Western blot - Anti-CD7 antibody [EPR4242] - BSA and Azide free (ab230834)

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

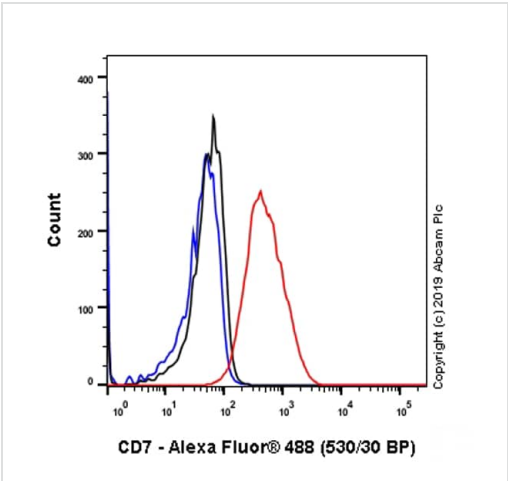
Secondary

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

This data was developed using **ab109296**, the same antibody clone in a different buffer formulation.

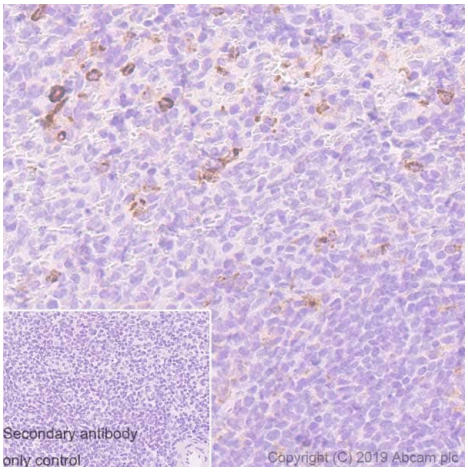
The molecular mass observed is consistent with what has been described in the literatures (PMID: 24157461, 2479685).



Flow Cytometry (Intracellular) - Anti-CD7 antibody [EPR4242] - BSA and Azide free (ab230834)

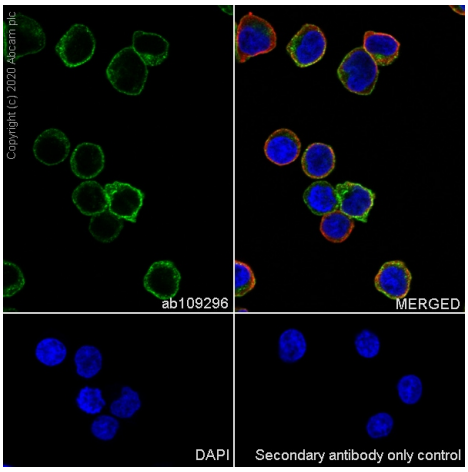
This data was developed using **ab109296**, the same antibody clone in a different buffer formulation.

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Jurkat (Human T cell leukemia T lymphocyte) cells labelling CD7 with purifiedab109296 at 1/100 dilution (1ï¿½g) (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 Fluorï¿½ 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.



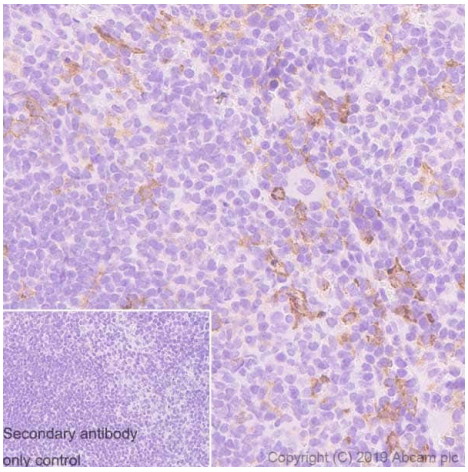
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD7 antibody [EPR4242] - BSA and Azide free (ab230834)

This data was developed using **ab109296**, the same antibody clone in a different buffer formulation.
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.



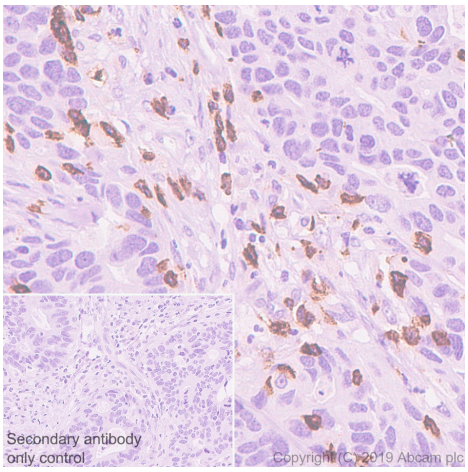
Immunocytochemistry/ Immunofluorescence - Anti-CD7 antibody [EPR4242] - BSA and Azide free (ab230834)

This data was developed using **ab109296**, the same antibody clone in a different buffer formulation.
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.



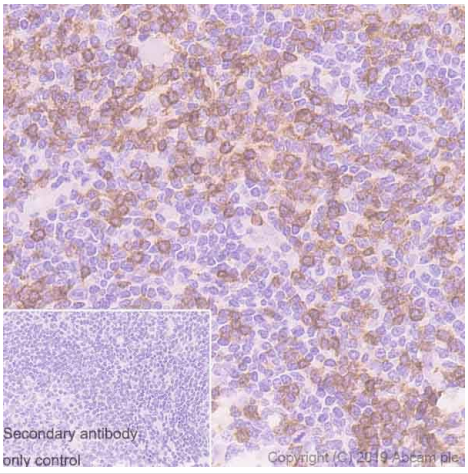
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD7 antibody [EPR4242] - BSA and Azide free (ab230834)

This data was developed using **ab109296**, the same antibody clone in a different buffer formulation.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse 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.



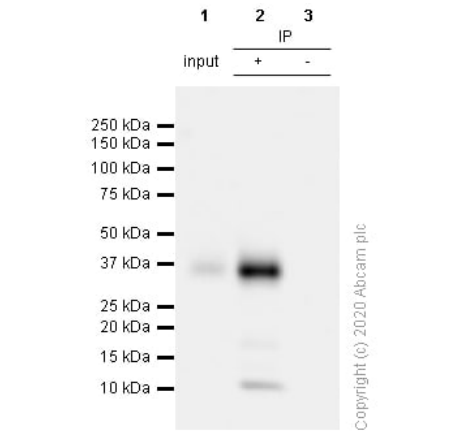
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD7 antibody [EPR4242] - BSA and Azide free (ab230834)

This data was developed using **ab109296**, the same antibody clone in a different buffer formulation.
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 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] - BSA and Azide free (ab230834)

This data was developed using **ab109296**, the same antibody clone in a different buffer formulation.
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] - BSA and Azide free (ab230834)

This data was developed using **ab109296**, the same antibody clone in a different buffer formulation.

CD7 was immunoprecipitated from 0.35 mg Human spleen lysate 10 ug with purified **ab109296** at 1/50. Western blot was performed on the immunoprecipitate using **ab109296** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(**ab131366**) was used at 1/5000 dilution.

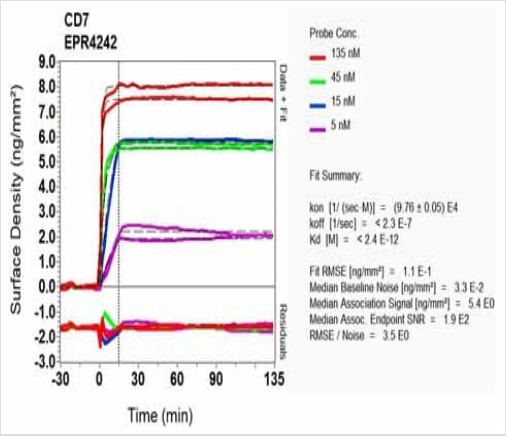
Lane 1: Human spleen lysate 10 ug

Lane 2: **ab109296** IP in Human spleen lysate

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

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 10 seconds



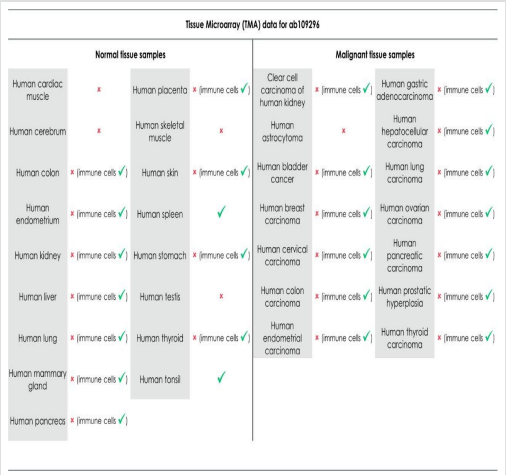
OI-RD Scanning - Anti-CD7 antibody [EPR4242] - BSA and Azide free (ab230834)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D

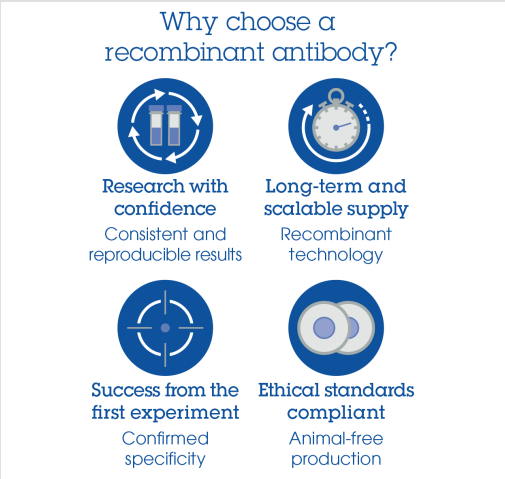
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109296**).


Tissue Microarray (TMA) data for ab109296

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

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD7 antibody [EPR4242] - BSA and Azide free (ab230834)

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.



Anti-CD7 antibody [EPR4242] - BSA and Azide free (ab230834)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors