

Product datasheet

Anti-CD10 antibody [EPR22867-118] ab256494

KO VALIDATED Recombinant RabMAb

★★★★★ 5 Abreviews 8 References 14 Images

Overview

Product name	Anti-CD10 antibody [EPR22867-118]
Description	Rabbit monoclonal [EPR22867-118] to CD10
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB, IHC-P, IP, IHC-Fr Unsuitable for: Flow Cyt
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Wild type HAP1, Raji and Ramos whole cell lysate, Rat lung, Rat kidney, Human tonsil and Mouse lung lysates. IHC-P: Human kidney, Human placenta, Human diffuse large B-cell lymphoma, Mouse kidney and Rat kidney tissues. IHC-Fr: Mouse and rat kidney tissue. ICC/IF: Ramos, WEHI-231 and 2.4G2 cells. IP: Raji cells.
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, 0.5% BSA, 40% Glycerol (glycerin, glycerine)
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR22867-118

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab256494 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	★★★★☆ (1)	1/500.
WB	★★★★★ (1)	1/1000. Predicted molecular weight: 85 kDa.
IHC-P	★★★★★ (1)	1/500.
IP		1/30.
IHC-Fr	★★★★★ (1)	1/100.

Application notes Is unsuitable for Flow Cyt.

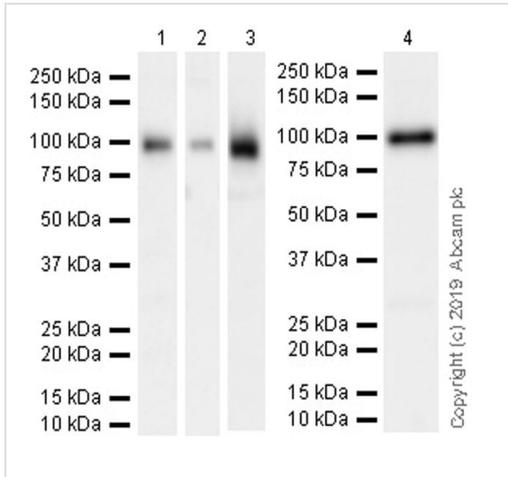
Target

Function Thermolysin-like specificity, but is almost confined on acting on polypeptides of up to 30 amino acids. Biologically important in the destruction of opioid peptides such as Met- and Leu-enkephalins by cleavage of a Gly-Phe bond. Able to cleave angiotensin-1, angiotensin-2 and angiotensin 1-9. Involved in the degradation of atrial natriuretic factor (ANF). Displays UV-inducible elastase activity toward skin preelastic and elastic fibers.

Sequence similarities Belongs to the peptidase M13 family.

Cellular localization Cell membrane.

Images



Western blot - Anti-CD10 antibody [EPR22867-118] (ab256494)

All lanes : Anti-CD10 antibody [EPR22867-118] (ab256494) at 1/1000 dilution

Lane 1 : Rat lung tissue lysate at 10 µg

Lane 2 : Rat kidney tissue lysate at 10 µg

Lane 3 : Human tonsil tissue lysate at 10 µg

Lane 4 : Mouse lung tissue lysate at 20 µg

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

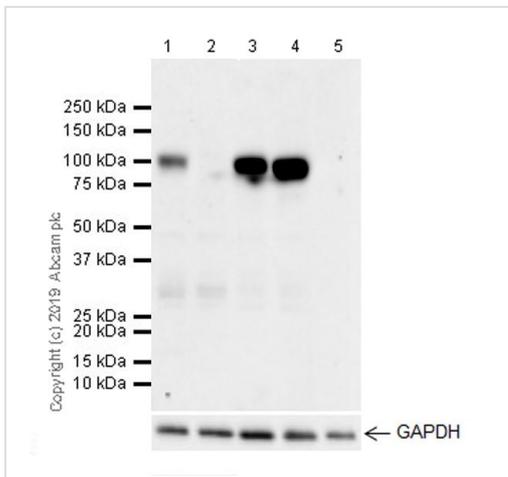
Predicted band size: 85 kDa

Observed band size: 100 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

The molecular weight observed is consistent with what has been described in the literature (PMID:15286660)

Exposure time: Lane 1/3: 8 seconds Lane 2: 1 second Lane 4: 3 seconds



Western blot - Anti-CD10 antibody [EPR22867-118] (ab256494)

All lanes : Anti-CD10 antibody [EPR22867-118] (ab256494) at 1/1000 dilution

Lane 1 : Wild type HAP1 whole cell lysate

Lane 2 : CD10 knockout HAP1 whole cell lysate

Lane 3 : Raji (human Burkitts lymphoma B lymphocyte), whole cell lysate

Lane 4 : Ramos (human Burkitts lymphoma B lymphocyte), whole cell lysate

Lane 5 : HT-29 (human colorectal adenocarcinoma epithelial cell), whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

Lanes 1-2 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**)

Lanes 3-5 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

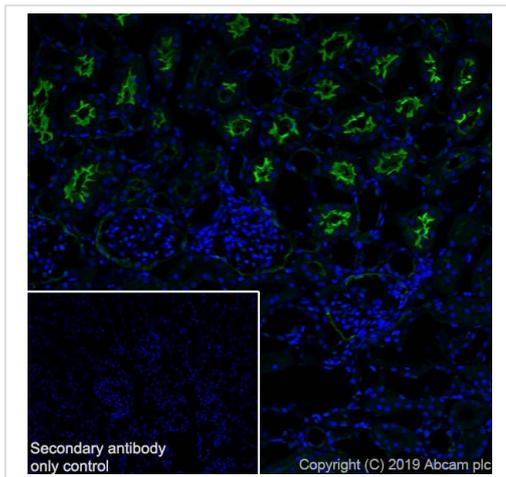
Predicted band size: 85 kDa

Observed band size: 100 kDa

Blocking and diluting buffer and concentration: 5% NFDN/TBST
ab256494 was shown to specifically react with CD10 in wild-type HAP1 cells as signal was lost in CD10 knockout cells. Wild-type and CD10 knockout samples were subjected to SDS-PAGE. ab256494 and **ab181602** (Rabbit anti-GAPDH loading control) were incubated 1 hour at room temperature at 1/1000 dilution and 1/200,000 dilution respectively. Blots were developed with Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) secondary antibody at 1/100,000 dilution for 1 hour at room temperature before imaging.

The molecular weight observed is consistent with what has been described in the literature (PMID:15286660) Negative control: HT-29 (PMID:19828468).

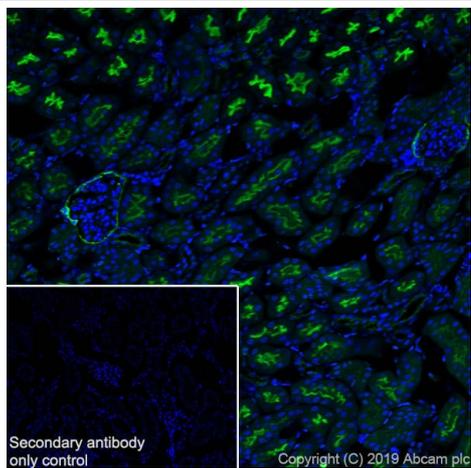
Exposure time: 59 seconds



Immunohistochemical analysis of 4% PFA fixed 0.2% Triton X-100 permeabilized frozen Rat kidney tissue labeling CD10 with ab256494 at 1/100 (5.45 µg/ml) dilution followed by **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution. The nuclear counterstain was DAPI (Blue). Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody was **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution.

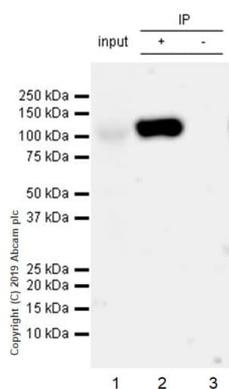
Immunohistochemistry (Frozen sections) - Anti-CD10 antibody [EPR22867-118] (ab256494)



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Immunoprecipitation - Anti-CD10 antibody [EPR22867-118] (ab256494)

CD10 was immunoprecipitated from 0.35 mg Raji (human Burkitt's lymphoma B lymphocyte) whole cell lysate with ab256494 at 1/30 (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab256494 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used at 1/5000 dilution.

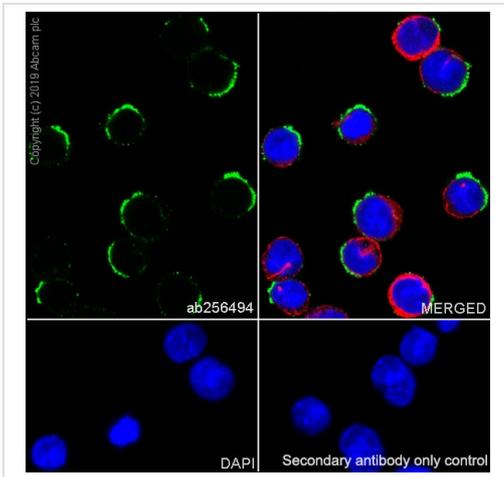
Lane 1: Raji (human Burkitt's lymphoma B lymphocyte) whole cell lysate 10µg

Lane 2: ab256494 IP in Raji whole cell lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab256494 in Raji whole cell lysate

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

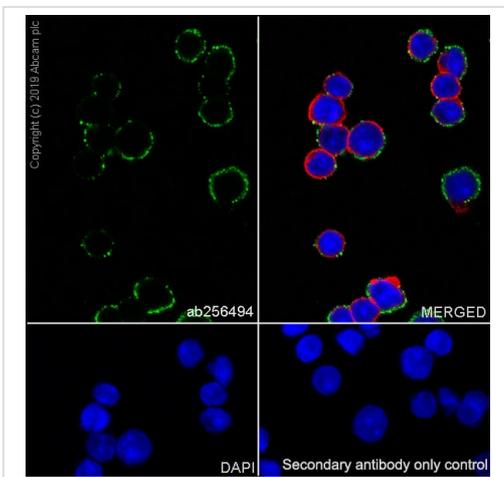
Exposure time: 3 min



Immunocytochemistry/ Immunofluorescence - Anti-CD10 antibody [EPR22867-118] (ab256494)

Immunofluorescent analysis of 100% Methanol-fixed 2.4G2 (rat B cell lymphoma B lymphocyte) cells labelling CD10 with ab256494 at 1/500 dilution, followed by Ab256494 anti- CD10 **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing staining in 2.4G2 cell line is observed. Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

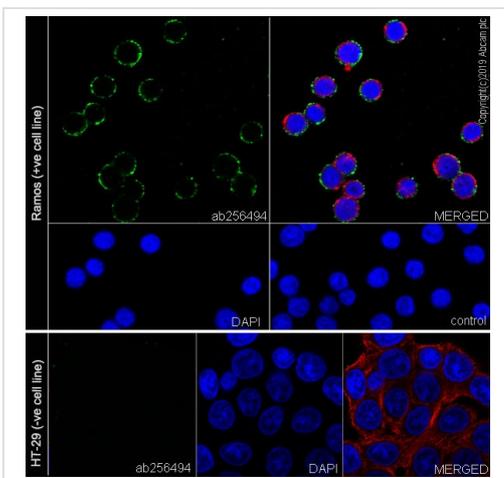
Secondary antibody only control: Secondary antibody is Ab256494 anti- CD10 **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-CD10 antibody [EPR22867-118] (ab256494)

Immunofluorescent analysis of 100% Methanol-fixed WEHI-231 (mouse B cell lymphoma B lymphocyte) cells labelling CD10 with ab256494 at 1/500 dilution, followed by Ab256494 anti- CD10 **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing staining in WEHI-231 cell line is observed. Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is Ab256494 anti- CD10 **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.

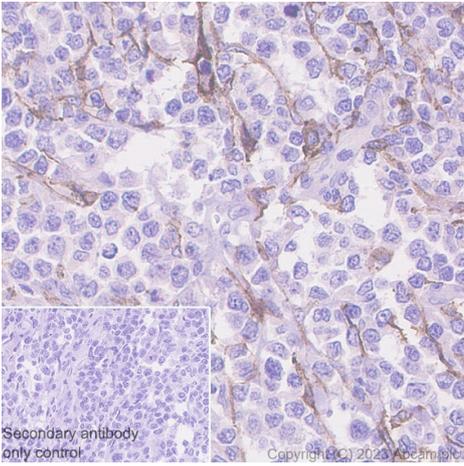


Immunocytochemistry/ Immunofluorescence - Anti-CD10 antibody [EPR22867-118] (ab256494)

Immunofluorescent analysis of 100% Methanol-fixed, Ramos (human Burkitt's lymphoma B lymphocyte) cells labelling CD10 with ab256494 at 1/500 dilution, followed by Ab256494 anti- CD10 **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing membranous staining in Ramos cell line is observed. Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue). **Negative control:** HT-29

□ PMID: 19828468 □

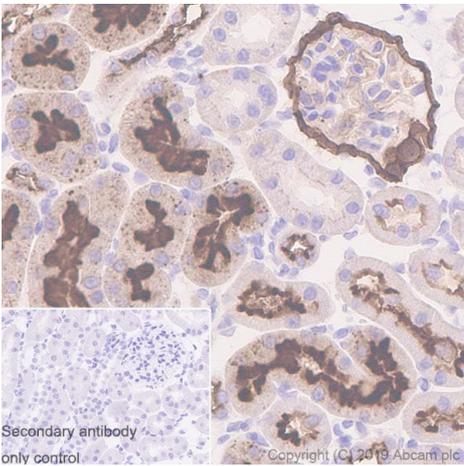
Secondary antibody only control: Secondary antibody is Ab256494 anti- CD10 **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD10 antibody [EPR22867-118] (ab256494)

Immunohistochemical analysis of paraffin-embedded Human diffuse large B-cell lymphoma labelling CD10 with ab256494 at 1/500 dilution, followed by a Goat Anti-Rabbit IgG H&L (HRP polymer) ready to use ([ab214880](#)).

Positive staining on Human diffuse large B-cell lymphoma is observed. Counter stained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a Goat Anti-Rabbit IgG H&L (HRP polymer) ready to use. Heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

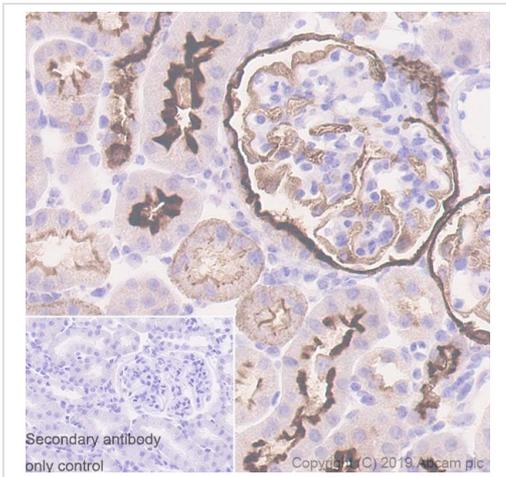


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD10 antibody [EPR22867-118] (ab256494)

Immunohistochemical analysis of paraffin-embedded Rat kidney tissue labeling CD10 with ab256494 at 1/500 dilution followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Membranous staining on renal tubules and of rat kidney (PMID:10705818) is observed. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

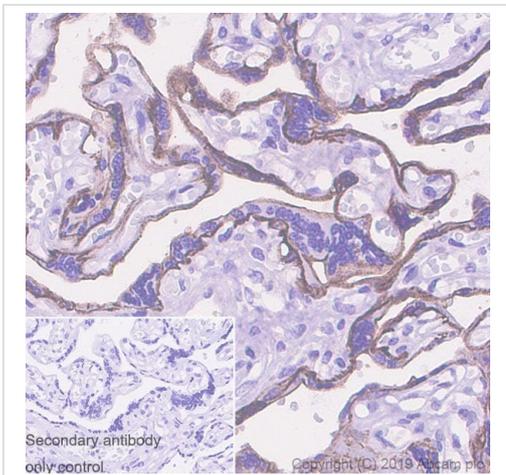


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD10 antibody [EPR22867-118] (ab256494)

Immunohistochemical analysis of paraffin-embedded Mouse kidney tissue labeling CD10 with ab256494 at 1/500 dilution followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Membranous staining on renal tubules and of mouse kidney (PMID:10705818) is observed. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).

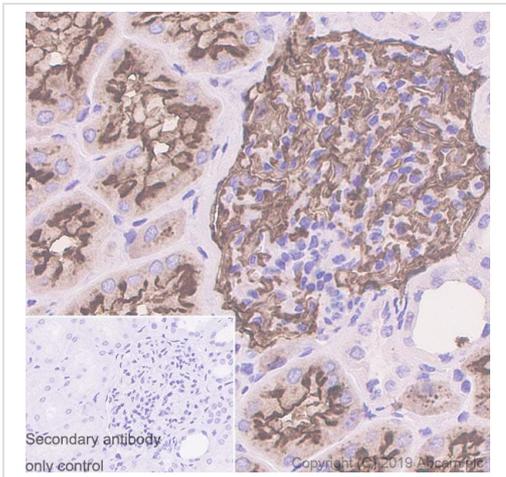


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD10 antibody [EPR22867-118] (ab256494)

Immunohistochemical analysis of paraffin-embedded Human placenta tissue labeling CD10 with ab256494 at 1/500 dilution followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Membranous staining on syncytiotrophoblast layer of human placenta (PMID:11092533) is observed. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).



Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling CD10 with ab256494 at 1/500 dilution followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on proximal convoluted tubules and glomerular epithelial cells of human kidney (PMID:10705818) is observed. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD10 antibody [EPR22867-118] (ab256494)

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>

Anti-CD10 antibody [EPR22867-118] (ab256494)

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

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