abcam

Product datasheet

Anti-CD10 antibody [EPR5904-110] ab208778

KO VALIDATED Recombinant RabMAb

2 References 6 Images

Overview

Product name	Anti-CD10 antibody [EPR5904-110]
Description	Rabbit monoclonal [EPR5904-110] to CD10
Host species	Rabbit
Tested applications	**Suitable for:** WB, IP, IHC-P
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment within Human CD10 aa 50-500. The exact sequence is proprietary. Database link: P08473
Positive control	WB: LNCaP, Raji and Ramos whole cell lysates; Human fetal kidney lysate. IHC-P: Human kidney and breast cancer tissues. IP: LNCaP whole cell lysate.
General notes	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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR5904-110
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab208778** in the following tested applications.

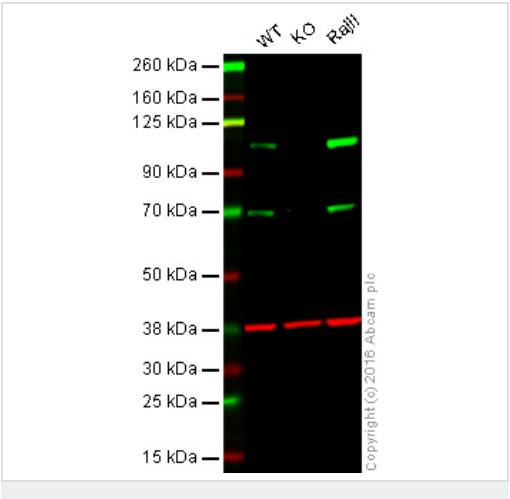
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 90-110 kDa (predicted molecular weight: 85 kDa).
IP		1/20.
IHC-P		1/4000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

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.

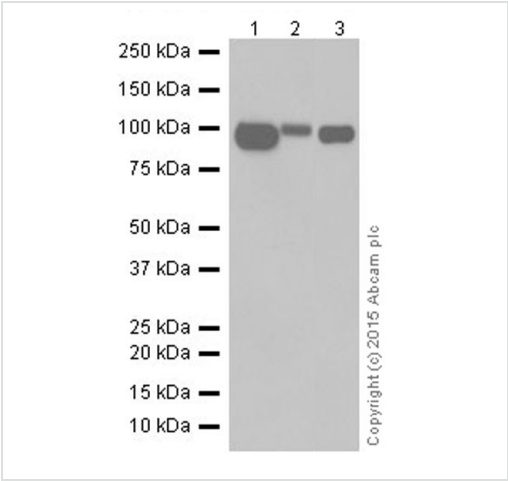
Images



Western blot - Anti-CD10 antibody [EPR5904-110] (ab208778)

Lane 1: Wild type HAP1 whole cell lysate (20 µg)
Lane 2: CD10 knockout HAP1 whole cell lysate (20 µg)
Lane 3: RAJI whole cell lysate (20 µg)
Lanes 1 - 3: Merged signal (red and green). Green - ab208778 observed at 100 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab208778 was shown to recognize CD10 when CD10 knockout samples were used, along with additional cross-reactive bands. Wild-type and CD10 knockout samples were subjected to SDS-PAGE. Ab208778 and ab8245 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 100 dilution and 1/10000 dilution respectively. Blots were developed with 800CW Goat anti Rabbit and 680CW Goat anti Mouse secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-CD10 antibody [EPR5904-110] (ab208778)

All lanes : Anti-CD10 antibody [EPR5904-110] (ab208778) at 1/1000 dilution

Lane 1 : LNCaP (Human prostate cancer cell line) whole cell lysate
Lane 2 : Raji (Human Burkitt's lymphoma cell line) whole cell lysate
Lane 3 : Ramos (Human Burkitt's lymphoma cell line) whole cell lysate

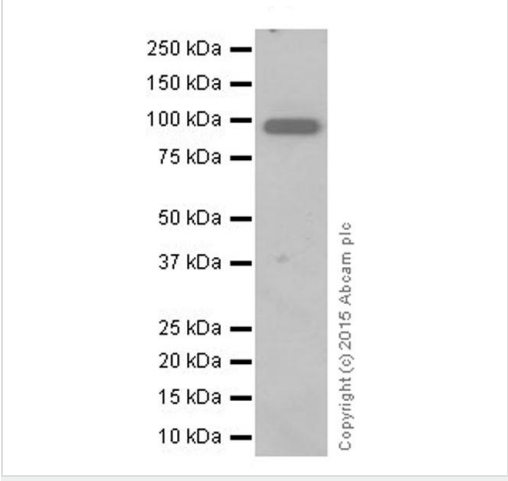
Lysates/proteins at 10 µg per lane.

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

Predicted band size: 85 kDa
Observed band size: 90-110 kDa
why is the actual band size different from the predicted?

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-CD10 antibody [EPR5904-110] (ab208778)

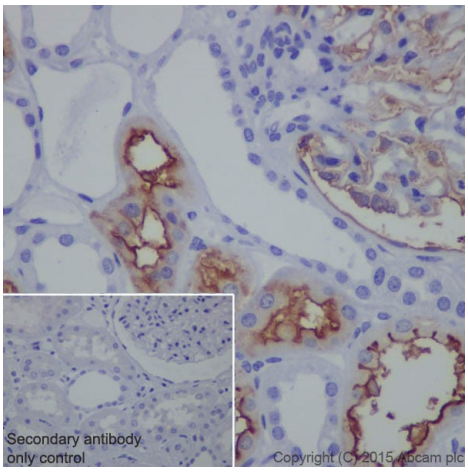
Anti-CD10 antibody [EPR5904-110] (ab208778) at 1/10000 dilution + Human fetal kidney lysate at 10 µg

Secondary
Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 85 kDa
Observed band size: 90-110 kDa why is the actual band size different from the predicted?

Exposure time: 5 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

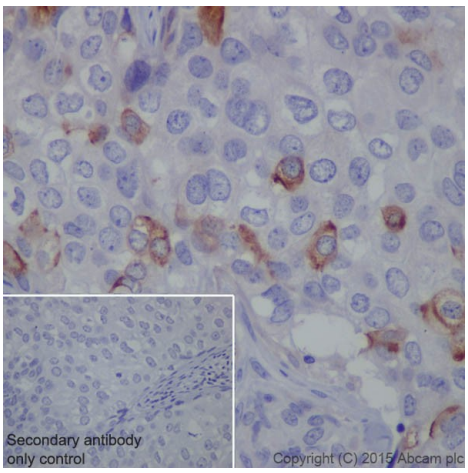


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD10 antibody [EPR5904-110] (ab208778)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling CD10 with ab208778 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Surface membrane staining was found in the glomerular epithelium and proximal tubular cells of the Human kidney. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab97051 at 1/500 dilution.

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

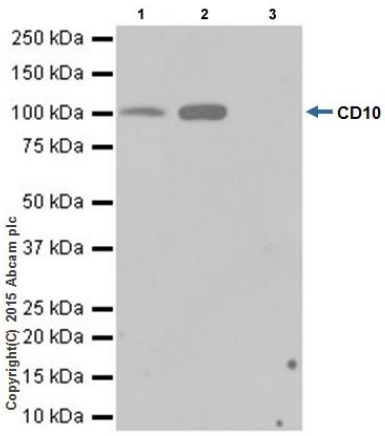


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD10 antibody [EPR5904-110] (ab208778)

Immunohistochemical analysis of paraffin-embedded Human breast cancer tissue labeling CD10 with ab208778 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Membrane staining was found in the subset cells of the Human breast cancer. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab97051 at 1/500 dilution.

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



Immunoprecipitation - Anti-CD10 antibody [EPR5904-110] (ab208778)

CD10 was immunoprecipitated from 1mg of LNCaP (Human prostate cancer cell line) whole cell lysate with ab208778 at 1/20 dilution.

Western blot was performed from the immunoprecipitate using ab208778 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: LNCaP whole cell lysate, 10µg (Input).

Lane 2: ab208778 IP in LNCaP whole cell lysate.

Lane 3: Rabbit IgG,monoclonal [EPR25A] - Isotype Control (ab172730) instead of ab208778 in LNCaP whole cell lysate.

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

Exposure time: 3 minutes.

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