abcam

Product datasheet

Anti-CD13 antibody [EPR4059] - BSA and Azide free ab196576

KO 評価済 リコンビナント RabMAb

画像数 15

製品の概要

製品名	Anti-CD13 antibody [EPR4059] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EPR4059] to CD13 - BSA and Azide free
由来種	Rabbit
アプリケーション	**適用あり:** ICC/IF, WB, IP, IHC-P **適用なし:** Flow Cyt
種交差性	**交差種:** Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	THP-1, PANC-1, U937, and A375 cell lysates, Human kidney tissue
特記事項	ab196576 is the carrier-free version of **ab108382**. 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. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	pH: 7.2 Constituent: PBS

キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR4059
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab196576の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 150 kDa (predicted molecular weight: 110 kDa).
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

追加情報 Is unsuitable for Flow Cyt.

ターゲット情報

機能 Broad specificity aminopeptidase. Plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases. May play a critical role in the pathogenesis of cholesterol gallstone disease. May be involved in the metabolism of regulatory peptides of diverse cell types including small intestinal and tubular epithelial cells, macrophages, granulocytes and synaptic membranes from the CNS. Found to cleave antigen peptides bound to major histocompatibility complex class II molecules of presenting cells and to degrade neurotransmitters at synaptic junctions. Is also implicated as a regulator of IL-8 bioavailability in the endometrium, and therefore may contribute to the regulation of angiogenesis. Is used as a marker for acute myeloid leukemia and plays a role in tumor invasion. In case of human coronavirus 229E (HCoV-229E) infection, serves as receptor for HCoV-229E spike glycoprotein. Mediates as well human cytomegalovirus (HCMV) infection.

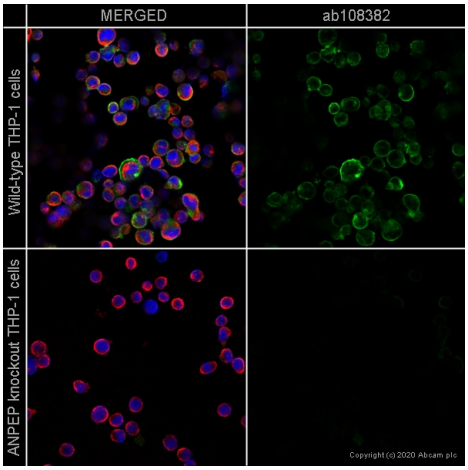
組織特異性 Expressed in epithelial cells of the kidney, intestine, and respiratory tract; granulocytes, monocytes, fibroblasts, endothelial cells, cerebral pericytes at the blood-brain barrier, synaptic membranes of cells in the CNS. Also expressed in endometrial stromal cells, but not in the endometrial glandular cells. Found in the vasculature of tissues that undergo angiogenesis and in malignant gliomas and lymph node metastases from multiple tumor types but not in blood vessels of normal tissues. A soluble form has been found in plasma. It is found to be elevated in plasma and effusions of cancer patients.

配列類似性 Belongs to the peptidase M1 family.

ドメイン Amino acids 260-353 are essential to mediate susceptibility to infection with HCoV-229E (in

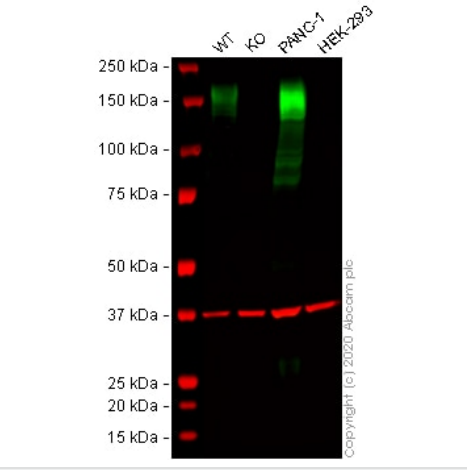
	porcine/human chimeric studies) and more specifically amino acids 288-295 (mutagenesis studies).
翻訳後修飾	Sulfated. N- and O-glycosylated. May undergo proteolysis and give rise to a soluble form.
細胞内局在	Cell membrane. Cytoplasm > cytosol. A soluble form has also been detected.

画像



Immunocytochemistry/ Immunofluorescence - Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

This data was developed using the same antibody clone in a different buffer formulation (**ab108382**). **ab108382** staining CD13 in wild-type THP-1 cells (top panel) and ANPEP knockout THP-1 cells (bottom panel) (**ab273759**). The cells were fixed with 100% methanol (5 min) then permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with **ab108382** at 1/1000 dilution and **ab7291** (Mouse monoclonal to alpha Tubulin) at 1/1000 dilution overnight at 4°C followed by a further incubation at room temperature for 1h with a goat secondary antibody to rabbit IgG (Alexa Fluor® 488) (**ab150081**) at 2 µg/ml (shown in green) and a goat secondary antibody to mouse IgG (Alexa Fluor® 594) (**ab150120**) at 2 µg/ml (shown in red). Nuclear DNA was labelled in blue with DAPI. Image was taken with a confocal microscope (Leica-Microsystems TCS SP8).



Western blot - Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

All lanes : Anti-CD13 antibody [EPR4059] (**ab108382**) at 1/1000 dilution

Lane 1 : Wild-type THP-1 cell lysate
Lane 2 : ANPEP knockout THP-1 cell lysate
Lane 3 : PANC-1 cell lysate
Lane 4 : HEK-293 cell lysate

Lysates/proteins at 30 µg per lane.

Performed under reducing conditions.

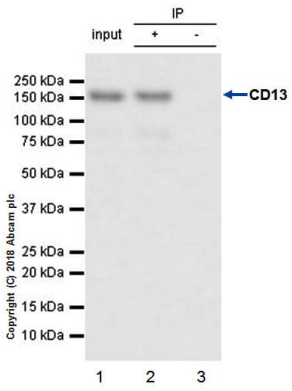
Predicted band size: 110 kDa
Observed band size: 160 kDa

This data was developed using the same antibody clone in a

different buffer formulation (**ab108382**).

Lanes 1 - 4: Merged signal (red and green). Green - **ab108382** observed at 160 kDa. Red - loading control **ab8245** (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

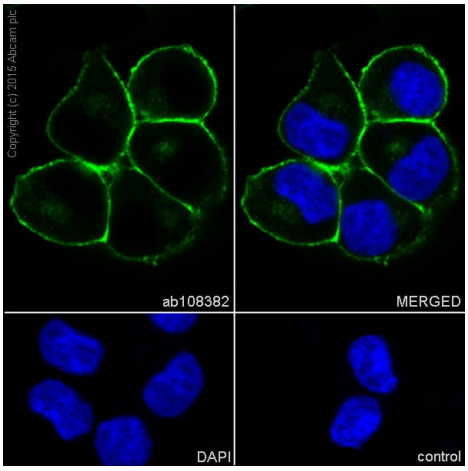
ab108382 was shown to react with CD13 in wild-type THP-1 cells in western blot with loss of signal observed in ANPEP knockout cell line **ab273759** (knockout cell lysate **ab275505**). Wild-type and ANPEP knockout THP-1 cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with **ab108382** and **ab8245** (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunoprecipitation - Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

ab108382 (purified) at 1:20 dilution (2ug) immunoprecipitating in THP-1 whole cell lysate. THP-1 (Human monocytic leukemia monocyte) whole cell lysate 10ug
Lane 2 (+): **ab108382** & THP-1 whole cell lysate
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab108382** in THP-1 whole cell lysate
For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.
Blocking and diluting buffer: 5% NFDM/TBST.

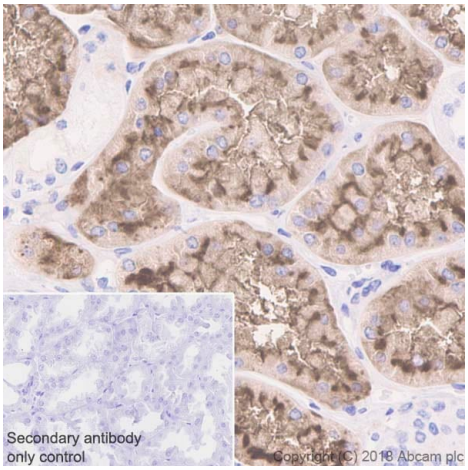
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108382**).



Immunocytochemistry/ Immunofluorescence - Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

Immunocytochemistry/ Immunofluorescence analysis of A375 (human malignant melanoma epithelial cell) cells labeling CD13 with purified **ab108382** at 1:500 (0.7 µg/ml). Cells were fixed in 100% Methanol and permeabilized with None. Cells were counterstained with None. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

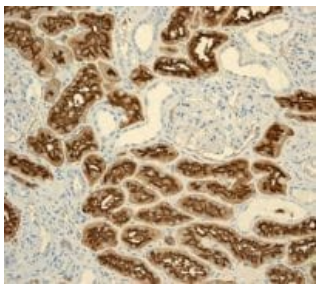
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108382**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue sections labeling CD13 with purified **ab108382** at 1:750 dilution (0.5 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use). PBS instead of the primary antibody was used as the negative control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108382**).

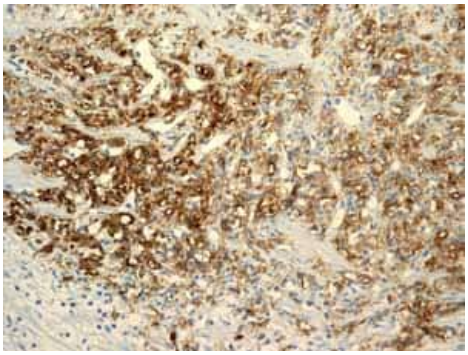


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

Immunohistochemical staining of paraffin-embedded Human kidney tissue using unpurified **ab108382** at a dilution of 1/100.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108382**).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

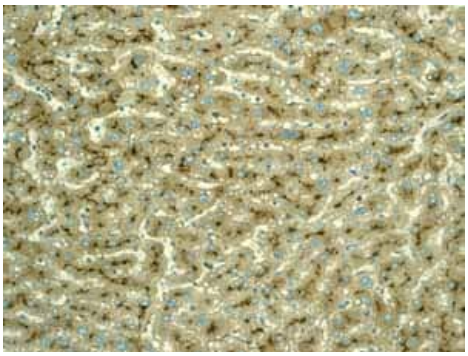


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

Unpurified **ab108382** showing positive staining in Prostatic carcinoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108382**).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

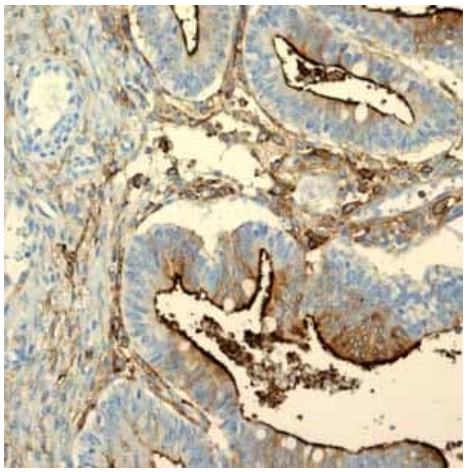


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

Unpurified **ab108382** showing positive staining in Normal liver tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108382**).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

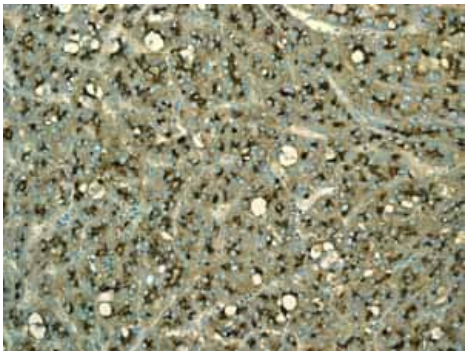


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

Unpurified **ab108382** showing positive staining in Ovarian carcinoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108382**).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

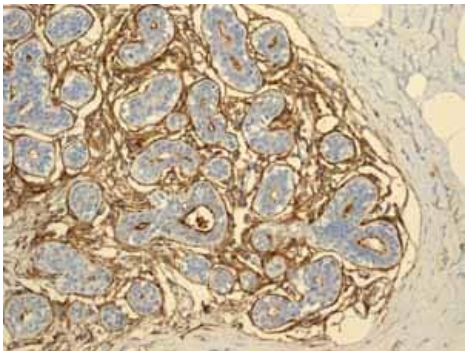


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

Unpurified **ab108382** showing positive staining in Hepatocellular carcinoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108382**).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

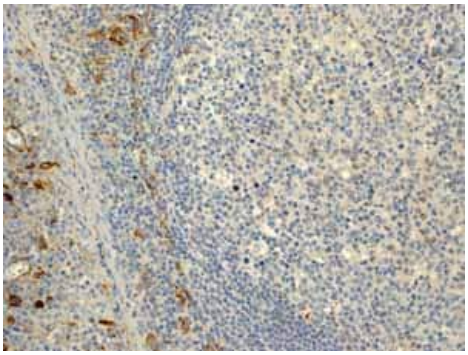


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

Unpurified **ab108382** showing positive staining in Normal breast tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108382**).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

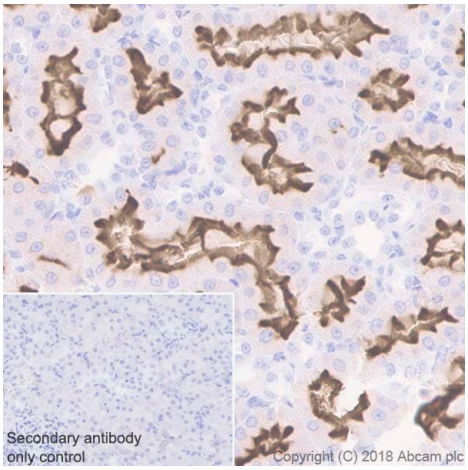


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

Unpurified **ab108382** showing positive staining in Normal tonsil tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108382**).

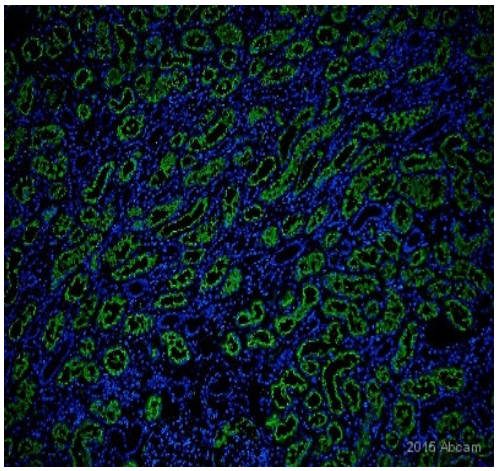
Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

This IHC data was generated using the same anti-CD13 antibody clone, EPR4059, in a different buffer formulation (cat# **ab108382**).

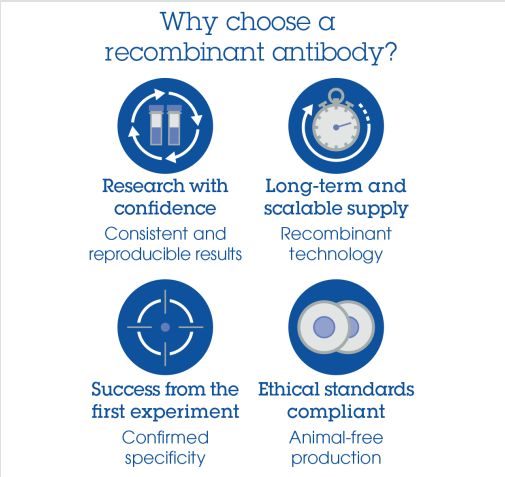
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat kidney tissue sections labeling CD13 with Purified **ab108382** at 1:750 dilution (0.5 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use). PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

This IHC data was generated using the same anti-CD13 antibody clone, EPR4059, in a different buffer formulation (cat# **ab108382**).

Unpurified **ab108382** staining CD13 in human kidney tissue sections by Immunohistochemistry (Formaldehyde/PFA-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde, permeabilized with 0.05% tween-20 and blocked for 60 minutes at 25°C. Antigen retrieval was by heat mediation. Samples were incubated with primary antibody at a dilution of 1/400 for 1 hour at 25°C. An Alexa Flour® 488-conjugated donkey anti-rabbit IgG polyclonal (1/1200) was used as the secondary antibody.



Anti-CD13 antibody [EPR4059] - BSA and Azide free (ab196576)

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