abcam

Product datasheet

Anti-CD13 antibody [EPR4058] - BSA and Azide free ab271872

敲除验证 重组 RabMAb

17 图像

概述

产品名称	Anti-CD13抗体[EPR4058] - BSA and Azide free
描述	兔单克隆抗体[EPR4058] to CD13 - BSA and Azide free
宿主	Rabbit
经测试应用	**适用于:** WB, IHC-P, ICC/IF **不适用于:** Flow Cyt or IP
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	IHC-P: Human kidney, liver, hepatocellular carcinoma, prostatic carcinoma, astrocytoma and breast tissues, mouse and rat kidney tissues; ICC/IF: THP-1 cells. WB: THP-1 and PANC-1 cell lysates.
常规说明	ab271872 is the carrier-free version of **ab108310**. 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**.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.20 Constituent: PBS
无载体	是
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR4058
同种型	IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab271872于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use at an assay dependent concentration. Predicted molecular weight: 109 kDa.
IHC-P		Use at an assay dependent concentration. See **IHC antigen retrieval protocols**.
ICC/IF		Use at an assay dependent concentration.

应用说明 Is unsuitable for Flow Cyt or IP.

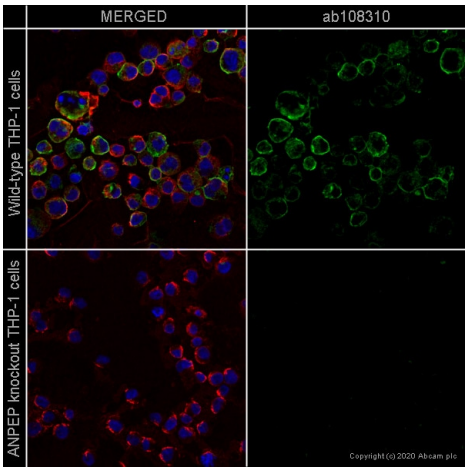
靶标

功能 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.

组织特异性 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

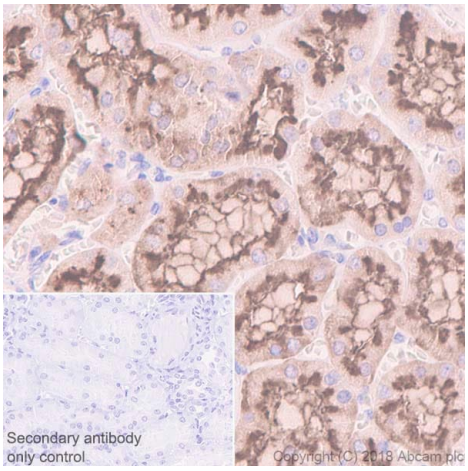
	malignant gliomas and lymph node metastases from multiple tumor types but not in blood vessels of normal tissues. A soluble form has been found in plasma. It is found to be elevated in plasma and effusions of cancer patients.
序列相似性	Belongs to the peptidase M1 family.
结构域	Amino acids 260-353 are essential to mediate susceptibility to infection with HCoV-229E (in porcine/human chimeric studies) and more specifically amino acids 288-295 (mutagenesis studies).
翻译后修饰	Sulfated. N- and O-glycosylated. May undergo proteolysis and give rise to a soluble form.
细胞定位	Cell membrane. Cytoplasm > cytosol. A soluble form has also been detected.

图片



Immunocytochemistry/ Immunofluorescence - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

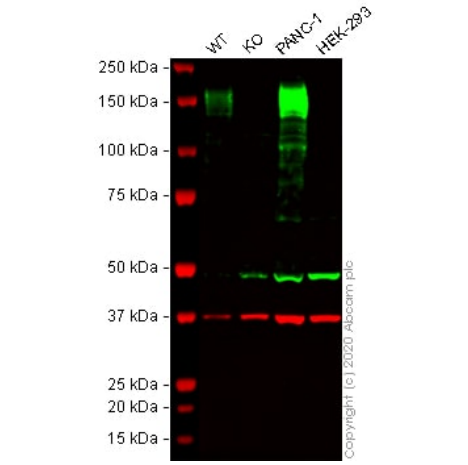
This data was developed using the same antibody clone in a different buffer formulation (**ab108310**). **ab108310** staining CD13 in wild-type THP-1 cells (top panel) and ANPEP knockout THP-1 cells (bottom panel) (**ab273759**). The cells were fixed with 4% paraformaldehyde (10 min) then permeabilized 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 **ab108310** at 1/500 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).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue sections labeling CD13 with purified **ab108310** at 1/1600 dilution (0.43 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108310**).



Western blot - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

All lanes : Anti-CD13 antibody [EPR4058] (**ab108310**) 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.

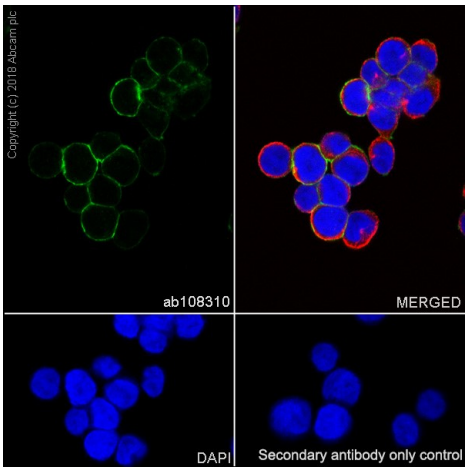
Predicted band size: 109 kDa
Observed band size: 160 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab108310**).

Lanes 1 - 4: Merged signal (red and green). Green - **ab108310** observed at 160 kDa. Red - loading control **ab8245** (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

ab108310 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 fluorescent western blot (TBS-based) blocking solution before incubation with **ab108310** 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.

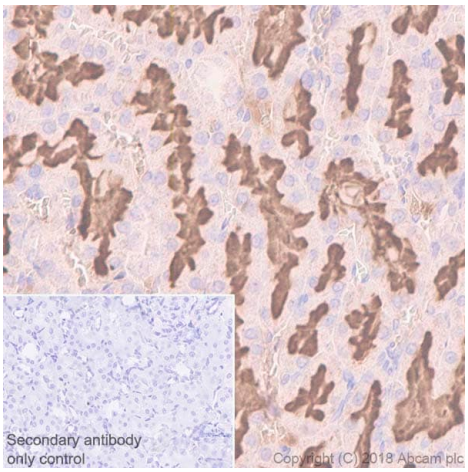


Immunocytochemistry/ Immunofluorescence - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

Confocal image showing membranous staining in THP-1 cells

ab108310 (purified) at 1/100 staining CD13 in the THP-1 (human monocytic leukemia monocyte) cell line by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 100% methanol. Samples were incubated with primary antibody 1/500. **ab150077** An Alexa Fluor® 488-conjugated Goat anti-Rabbit IgG at 1/1000 was used as the secondary antibody. Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 was used as a counter stain and DAPI was used as a nuclear counter stain.

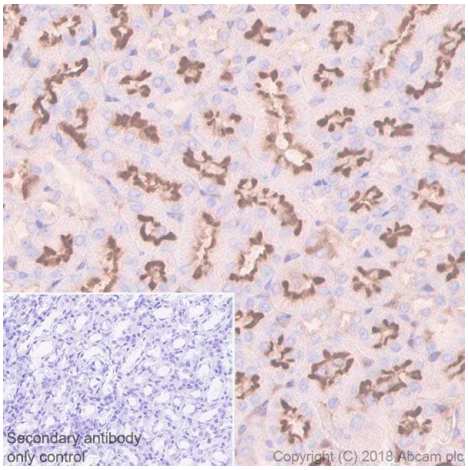
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108310**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat kidney tissue sections labeling CD13 with purified **ab108310** at 1/1600 dilution (0.43 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

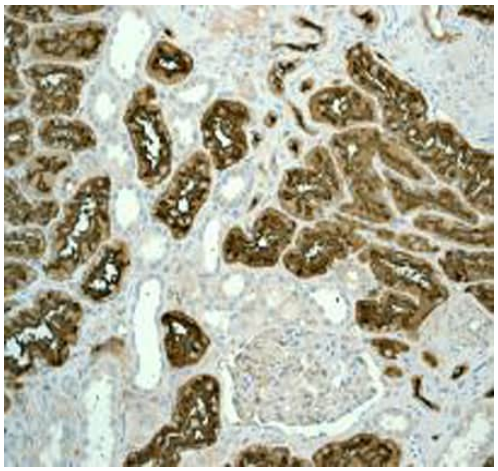
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108310**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue sections labeling CD13 with purified **ab108310** at 1/1600 dilution (0.43 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

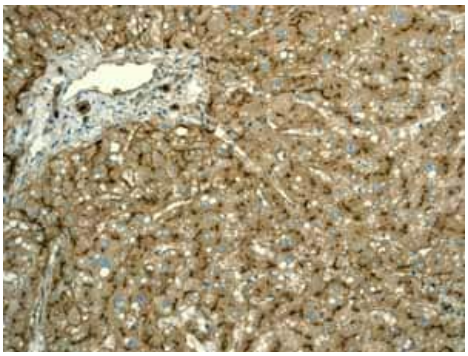
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108310**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

ab108310 (unpurified), at 1/250, staining CD13 in human kidney tissue by immunohistochemistry. Heat mediated antigen retrieval was performed using citrate buffer pH 6 before commencing with IHC staining protocol.

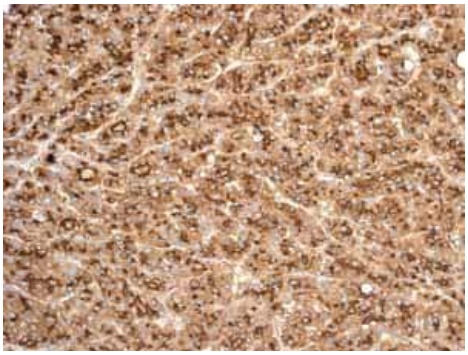
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108310**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

ab108310 (unpurified) showing positive staining in human normal liver tissue. Heat mediated antigen retrieval was performed using citrate buffer pH 6 before commencing with IHC staining protocol.

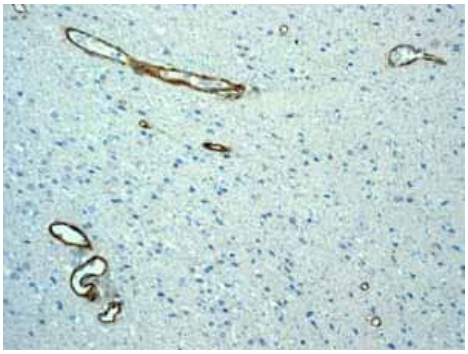
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108310**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

ab108310 (unpurified) showing positive staining in human hepatocellular carcinoma tissue. Heat mediated antigen retrieval was performed using citrate buffer pH 6 before commencing with IHC staining protocol.

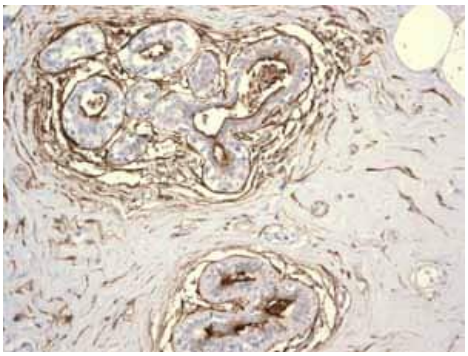
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108310**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

ab108310 (unpurified) showing positive staining in human astrocytoma tissue. Heat mediated antigen retrieval was performed using citrate buffer pH 6 before commencing with IHC staining protocol.

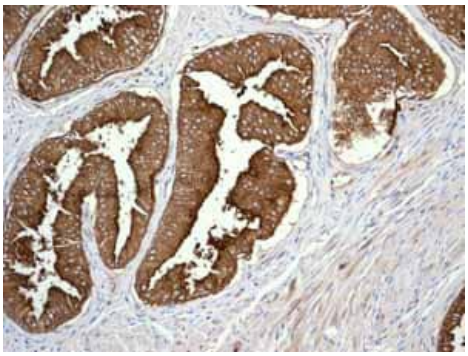
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108310**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

ab108310 (unpurified) showing positive staining in human normal breast tissue. Heat mediated antigen retrieval was performed using citrate buffer pH 6 before commencing with IHC staining protocol.

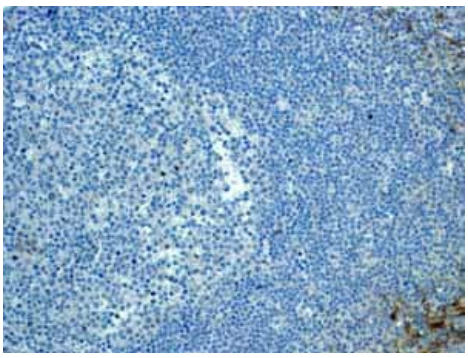
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108310**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

ab108310 (unpurified) showing positive staining in human prostatic carcinoma tissue. Heat mediated antigen retrieval was performed using citrate buffer pH 6 before commencing with IHC staining protocol.

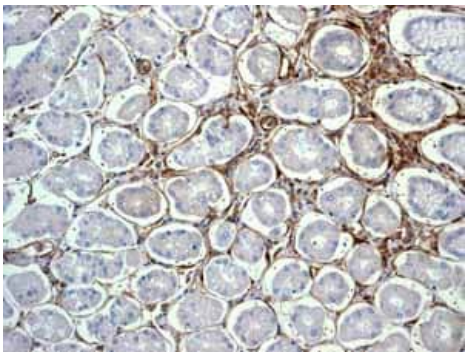
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108310**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

ab108310 (unpurified) showing positive staining in human normal tonsil tissue. Heat mediated antigen retrieval was performed using citrate buffer pH 6 before commencing with IHC staining protocol.

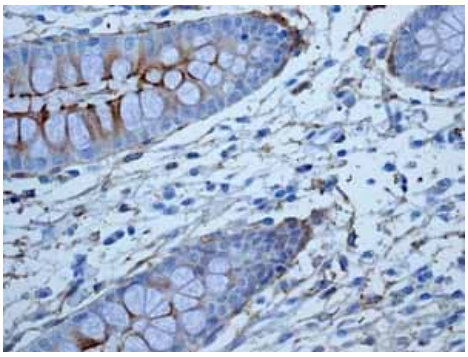
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108310**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

ab108310 (unpurified) showing positive staining in human normal stomach tissue. Heat mediated antigen retrieval was performed using citrate buffer pH 6 before commencing with IHC staining protocol.

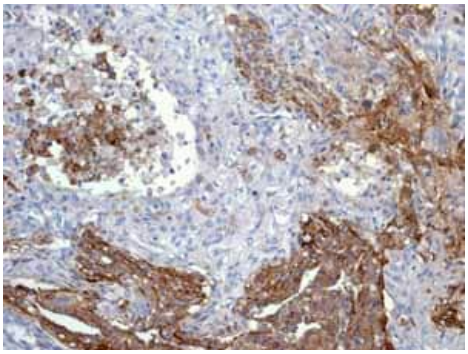
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108310**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

ab108310 (unpurified) showing positive staining in human normal colon tissue. Heat mediated antigen retrieval was performed using citrate buffer pH 6 before commencing with IHC staining protocol.

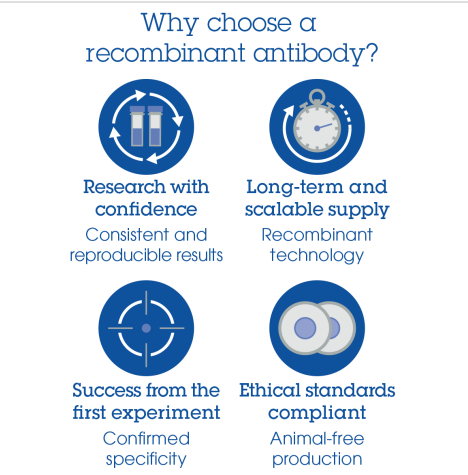
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108310**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

ab108310 (unpurified) showing positive staining in human lung adenocarcinoma tissue. Heat mediated antigen retrieval was performed using citrate buffer pH 6 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108310**).



Anti-CD13 antibody [EPR4058] - BSA and Azide free (ab271872)

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