abcam

Product datasheet

Anti-CD105 antibody [EPR21846] - BSA and Azide free ab231832

Recombinant RabMAb

8 Images

Overview

Product name	Anti-CD105 antibody [EPR21846] - BSA and Azide free
Description	Rabbit monoclonal [EPR21846] to CD105 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, IHC-Fr, WB, ICC/IF, IP, Flow Cyt
Species reactivity	**Reacts with:** Mouse
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Mouse E14.5 liver tissue.
General notes	ab231832 is the carrier-free version of **ab221675**. 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.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR21846
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab231832 in the following tested applications.

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

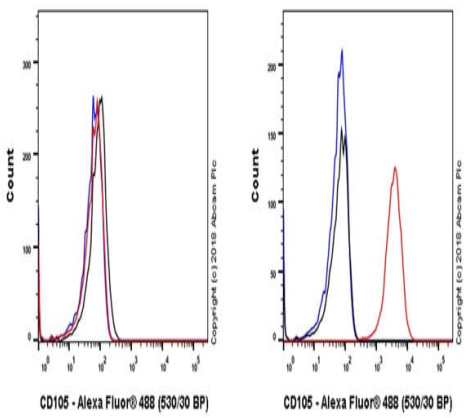
Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IHC-Fr		Use at an assay dependent concentration. Perform heat mediated antigen retrieval by using Tris-EDTA buffer (pH9.0) (**ab94681**).
WB		Use at an assay dependent concentration. Detects a band of approximately 95 kDa (predicted molecular weight: 70 kDa).
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration.

Target

Function	Major glycoprotein of vascular endothelium. May play a critical role in the binding of endothelial cells to integrins and/or other RGD receptors.
Tissue specificity	Endoglin is restricted to endothelial cells in all tissues except bone marrow.
Involvement in disease	Defects in ENG are the cause of hereditary hemorrhagic telangiectasia type 1 (HHT1) [MIM:187300, 108010]; also known as Osler-Rendu-Weber syndrome 1 (ORW1). HHT1 is an autosomal dominant multisystemic vascular dysplasia, characterized by recurrent epistaxis, muco-cutaneous telangiectases, gastro-intestinal hemorrhage, and pulmonary (PAVM), cerebral (CAVM) and hepatic arteriovenous malformations; all secondary manifestations of the underlying vascular dysplasia. Although the first symptom of HHT1 in children is generally nose bleed, there

	is an important clinical heterogeneity.
Cellular localization	Membrane.

Images



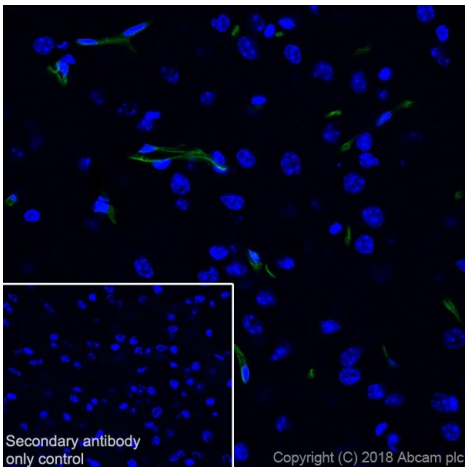
Flow Cytometry - Anti-CD105 antibody [EPR21846] - BSA and Azide free (ab231832)

Flow cytometric analysis of NIH/3T3 (mouse embryo fibroblast cell line) cell line (left panel) and bEND.3 (mouse brain endothelioma cell line) cell line (right panel) labeling CD105 with **ab221675** at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/2000 dilution was used as the secondary antibody.

Gated on total viable cells.

Negative control: NIH/3T3. (PMID: 8194490).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab221675**).



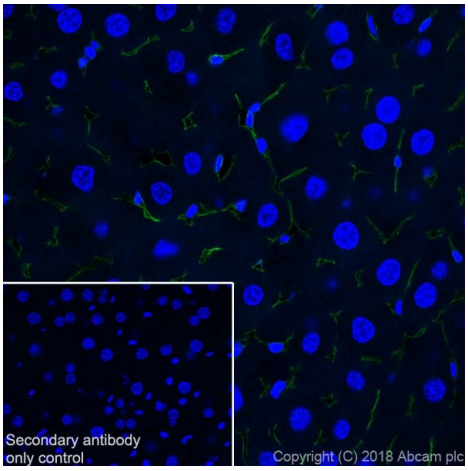
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD105 antibody [EPR21846] - BSA and Azide free (ab231832)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse brain tissue labeling CD105 with **ab221675** at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/500 dilution. Positive staining in the endothelial cells of blood vessels in mouse brain tissue section (PMID: 24699047). The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab221675**).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

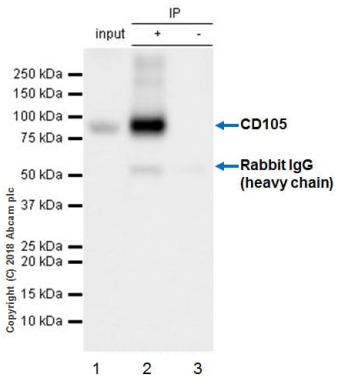


Immunohistochemistry (Frozen sections) - Anti-CD105 antibody [EPR21846] - BSA and Azide free (ab231832)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse liver tissue labeling CD105 with **ab221675** at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/500 dilution (green). Positive staining in the hepatic sinusoidal endothelial cells on mouse liver tissue section (PMID: 12947156; 24507660). The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab221675**).



Immunoprecipitation - Anti-CD105 antibody [EPR21846] - BSA and Azide free (ab231832)

CD105 was immunoprecipitated from 0.35 mg of bEND.3 (mouse brain endothelioma cell line) whole cell lysate with **ab221675** at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab221675** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/5000 dilution.

Lane 1: bEND.3 whole cell lysate 10 µg (Input).

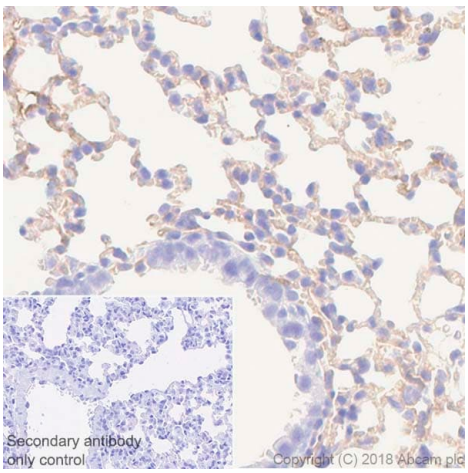
Lane 2: **ab221675** IP in bEND.3 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab221675** in bEND.3 whole cell lysate.

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

Exposure time: 5 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab221675**).



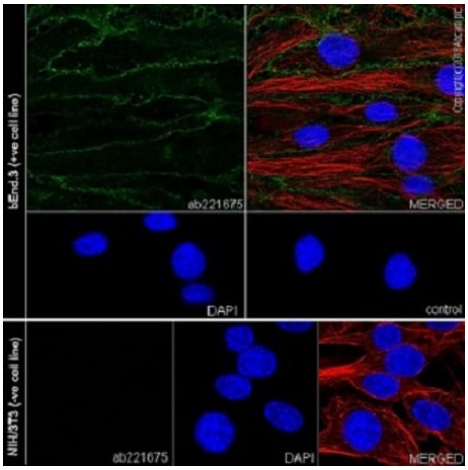
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD105 antibody [EPR21846] - BSA and Azide free (ab231832)

Immunohistochemical analysis of paraffin-embedded mouse lung tissue labeling CD105 with **ab221675** at 1/100 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**), Ready to use. Positive staining on endothelial cells of mouse lung is observed (PMID: 14528280). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**), Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab221675**).

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



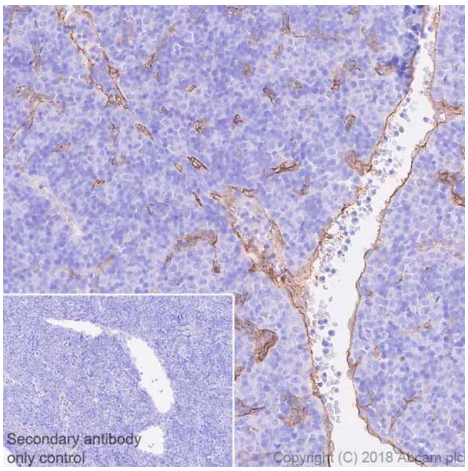
Immunocytochemistry/ Immunofluorescence - Anti-CD105 antibody [EPR21846] - BSA and Azide free (ab231832)

Immunofluorescent analysis of 100% methanol-fixed bEND.3 (mouse brain endothelioma cell line) cells labeling CD105 with **ab221675** at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining in Neuro-2a cell line. **Negative control:** NIH/3T3 (PMID: 8194490).

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab221675**).



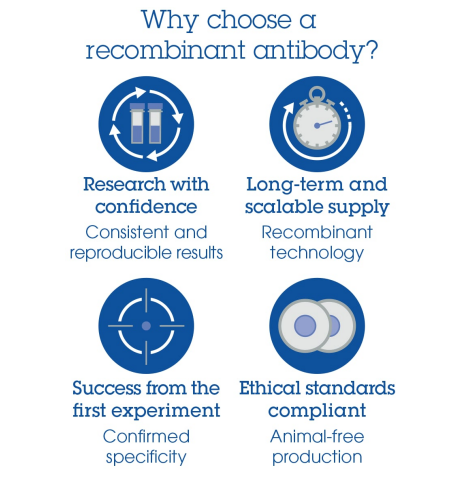
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD105 antibody [EPR21846] - BSA and Azide free (ab231832)

Immunohistochemical analysis of paraffin-embedded mouse E14.5 liver tissue labeling CD105 with **ab221675** at 1/100 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**), Ready to use. Positive staining on endothelial cells of mouse E14.5 liver is observed (PMID: 18805961). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**), Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab221675**).

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



Anti-CD105 antibody [EPR21846] - BSA and Azide free (ab231832)

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