

Anti-CD105 antibody [EPR19911-220] - BSA and Azide free ab252548

KO VALIDATED

Recombinant

RabMAb

8 Images

Overview

Product name	Anti-CD105 antibody [EPR19911-220] - BSA and Azide free
Description	Rabbit monoclonal [EPR19911-220] to CD105 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, IP Unsuitable for: Flow Cyt or ICC/IF
Species reactivity	Reacts with: Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	IP: HeLA whole cell lysate. IHC-P: Human liver and kidney tissue; rat kidney tissue.
General notes	<p>ab252548 is the carrier-free version of ab252345.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <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. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR19911-220
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab252548 in the following tested applications.

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

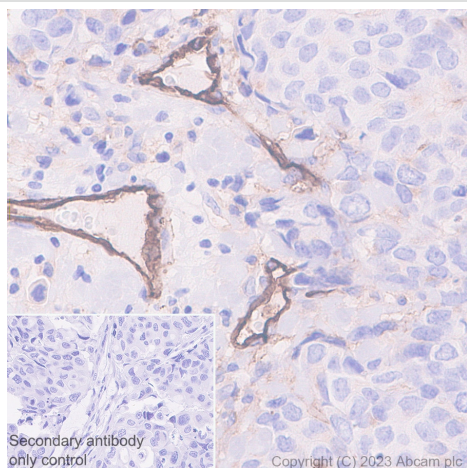
Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 95, 190 kDa (predicted molecular weight: 71 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		Use at an assay dependent concentration.

Application notes Is unsuitable for Flow Cyt or ICC/IF.

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



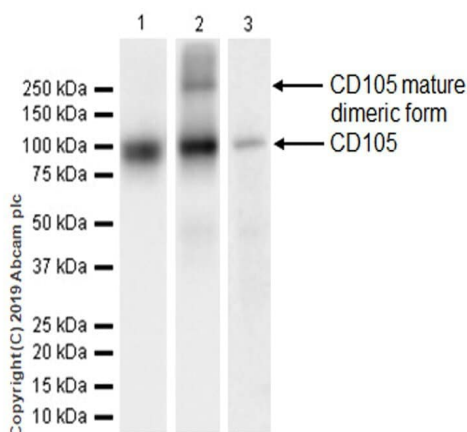
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD105 antibody
[EPR19911-220] - BSA and Azide free (ab252548)

Immunohistochemical analysis of human breast carcinoma tissue staining CD105 with **ab252345** at 1/2000 dilution and a ready to use secondary Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on endothelial cells of human breast carcinoma. Counterstaining was with Hematoxylin.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins. The section was incubated with **ab252345** for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

This data was developed using the same antibody clone in a different buffer formulation (**ab252345**)



Western blot - Anti-CD105 antibody [EPR19911-220]
- BSA and Azide free (ab252548)

All lanes : Anti-CD105 antibody [EPR19911-220] (**ab252345**) at 1/1000 dilution

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2 : HUVEC (human umbilical vein endothelial cell line) whole cell lysate

Lane 3 : Rat spleen lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/10000 dilution

Predicted band size: 71 kDa

Observed band size: 190,95 kDa

This data was developed using **ab252345**, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

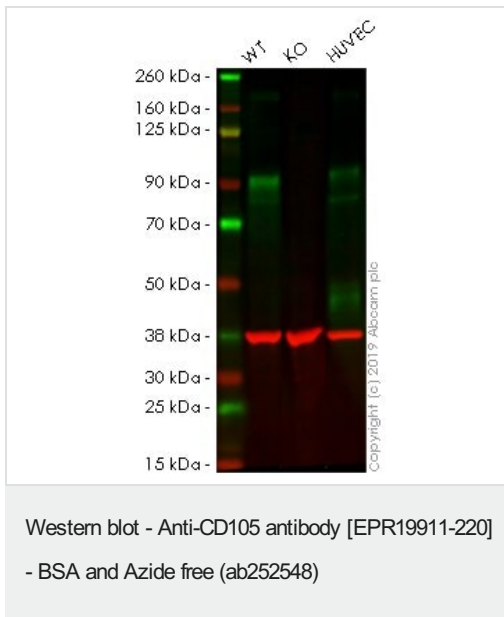
Exposure times.

Lane 1: 26 seconds.

Lane 2: 6 seconds.

Lane 3: 3 minutes.

The expression profile / molecular weight observed is consistent with what has been described in the literature (PMID: 12746487; 9872992).



All lanes : Anti-CD105 antibody [EPR19911-220] ([ab252345](#))

Lane 1 : Wild-type HeLa whole cell lysate

Lane 2 : ENG knockout HeLa whole cell lysate

Lane 3 : HUVEC whole cell lysate

Lysates/proteins at 20 µg per lane.

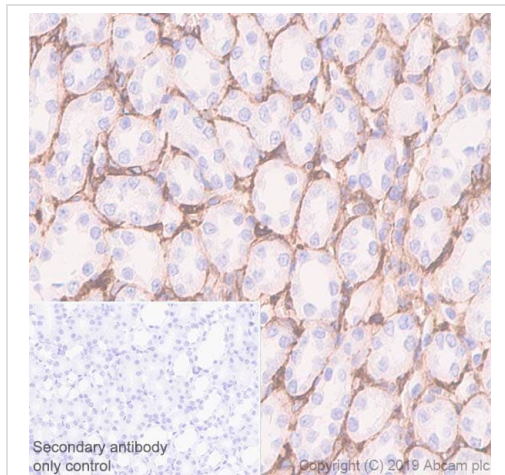
Predicted band size: 71 kDa

Observed band size: 95 kDa

This data was developed using [ab252345](#), the same antibody clone in a different buffer formulation.

Lanes 1 - 4: Merged signal (red and green). Green - [ab252345](#) observed at 95 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

[ab252345](#) was shown to recognize ENG (Endoglin) in wild-type HeLa cells as signal was lost at the expected MW in ENG knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and ENG knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% Milk. Ab252345 and [ab8245](#) (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1 µg/ml and 1/20000 dilution respectively. Blots were developed 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 1/20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD105 antibody [EPR19911-220] - BSA and Azide free (ab252548)

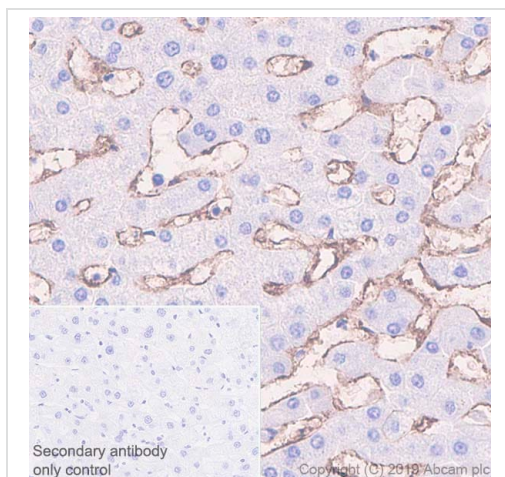
Immunohistochemical analysis of paraffin-embedded rat kidney tissue labeling CD105 with **ab252345** at 1/2000 dilution, followed by the Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) ready to use. Positive staining on peritubular microvasculature of rat kidney (PMID: 25381426) is observed. 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.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 minutes.

The section was incubated with **ab252345** for 30 mins at RT. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab252345**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD105 antibody [EPR19911-220] - BSA and Azide free (ab252548)

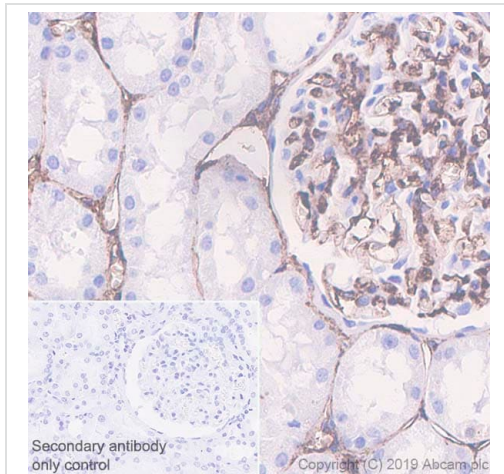
Immunohistochemical analysis of paraffin-embedded human liver tissue labeling CD105 with **ab252345** at 1/2000 dilution, followed by the Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) ready to use. Positive staining on sinusoidal endothelial cells of human liver (PMID: 30563158) is observed. 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.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 minutes.

The section was incubated with **ab252345** for 30 mins at RT. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab252345**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD105 antibody [EPR19911-220] - BSA and Azide free (ab252548)

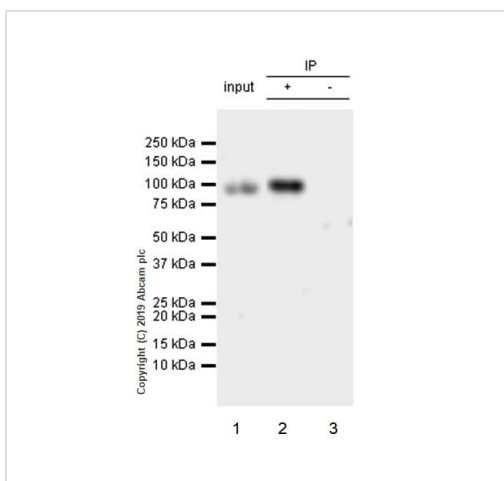
Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling CD105 with **ab252345** at 1/2000 dilution, followed by the Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) ready to use. Positive staining on glomerular and peritubular microvasculature of human kidney (PMID: 25381426) is observed. 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.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 minutes.

The section was incubated with **ab252345** for 30 mins at RT. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab252345**).



Immunoprecipitation - Anti-CD105 antibody [EPR19911-220] - BSA and Azide free (ab252548)

CD105 was immunoprecipitated from 0.35 mg of HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate with **ab252345** at 1/20 dilution. Western blot was performed from the immunoprecipitate using **ab252345** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/5000 dilution.

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

Lane 2: **ab252345** IP in HeLa whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab252345** in HeLa whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure time: 3 minutes.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab252345**).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-CD105 antibody [EPR19911-220] - BSA and Azide free (ab252548)

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

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