

Product datasheet

Anti-CD105 antibody [EPR10145-12] ab169545

KO **VALIDATED** Recombinant RabMAB

★★★★☆ 3 Abreviews 15 References 14 Images

Overview

Product name	Anti-CD105 antibody [EPR10145-12]
Description	Rabbit monoclonal [EPR10145-12] to CD105
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment corresponding to Human CD105 aa 1-200. Database link: P17813
Positive control	WB: HeLa, ECV-304 and HUVEC cell lysates; Human tonsil tissue lysate; Immunoprecipitation pellet from ECV-304 cell lysate. IHC-P: Human glioma, clear cell carcinoma, tonsil and kidney tissues.
General notes	<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> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p>

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: 40% Glycerol, 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR10145-12
Isotype	IgG

Applications

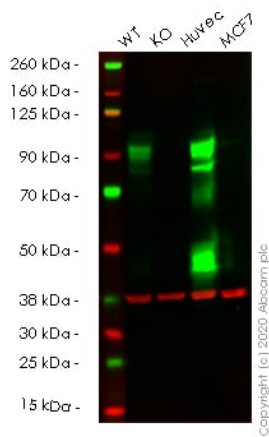
The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab169545 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	1/1000 - 1/2000. Predicted molecular weight: 70 kDa. For unpurified use at 1/50.
IHC-P	★★★★★ (2)	1/900. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols . For unpurified use at 1/30.

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



Western blot - Anti-CD105 antibody [EPR10145-12] (ab169545)

All lanes : Anti-CD105 antibody [EPR10145-12] (ab169545) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : ENG knockout HeLa cell lysate

Lane 3 : HUVEC cell lysate

Lane 4 : MCF7 cell lysate

Lysates/proteins at 20 µg per lane.

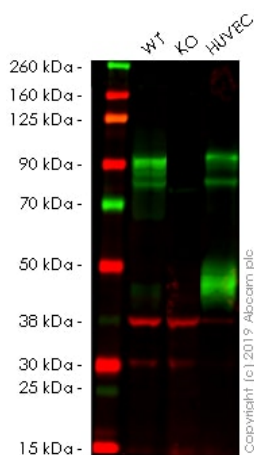
Performed under reducing conditions.

Predicted band size: 70 kDa

Observed band size: 70-120 kDa

Lanes 1-4: Merged signal (red and green). Green - ab169545 observed at 70-120 kDa. Red - loading control ab8245 observed at 37 kDa.

ab169545 Anti-CD105 antibody [EPR10145-12] was shown to specifically react with CD105 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265178 (knockout cell lysate ab256906) was used. Wild-type and CD105 knockout samples were subjected to SDS-PAGE. ab169545 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-CD105 antibody [EPR10145-12]
(ab169545)

All lanes : Anti-CD105 antibody [EPR10145-12] (ab169545) at 1/1000 dilution

Lane 1 : Wild-type HeLa whole cell lysate

Lane 2 : CD105 knockout HeLa whole cell lysate

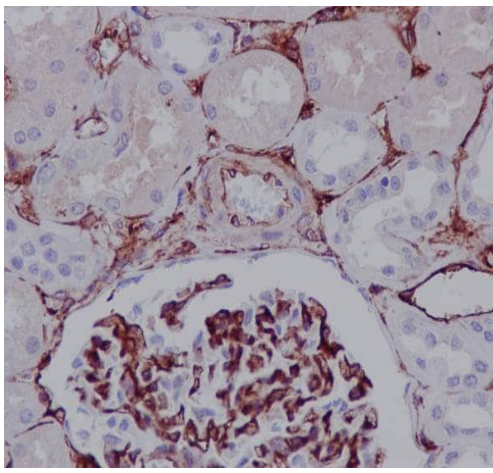
Lane 3 : HUVEC whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 70 kDa

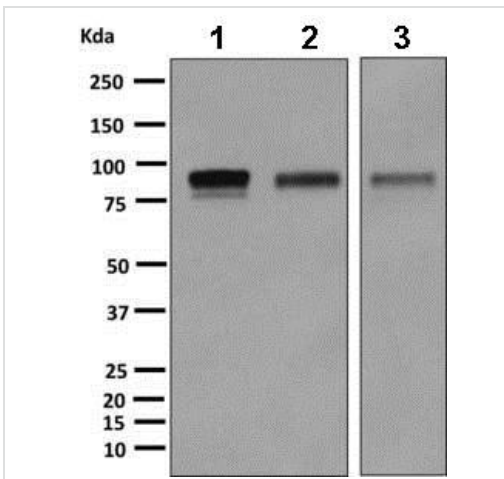
Lanes 1 - 3: Merged signal (red and green). Green - ab169545 observed at 70 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

ab169545 was shown to recognize CD105 in wild-type HeLa cells as signal was lost at the expected MW in CD105 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and CD105 knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% milk. Ab169545 and [ab8245](#) (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution 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 [EPR10145-12] (ab169545)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue labelling CD105 with unpurified ab169545 at 1/30. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit IgG was used as the secondary antibody. Counterstained with hematoxylin.



Western blot - Anti-CD105 antibody [EPR10145-12] (ab169545)

All lanes : Anti-CD105 antibody [EPR10145-12] (ab169545) at 1/1000 dilution (unpurified)

Lane 1 : ECV-304 cell lysate

Lane 2 : Human tonsil cell lysate

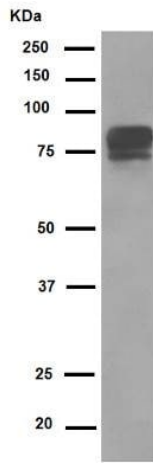
Lane 3 : HUVEC cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labeled goat anti-rabbit at 1/2000 dilution

Predicted band size: 70 kDa



Western blot - Anti-CD105 antibody [EPR10145-12] (ab169545)

Anti-CD105 antibody [EPR10145-12] (ab169545) at 1/50 dilution (unpurified) + ECV-304 cell lysate at 10 µg

Secondary

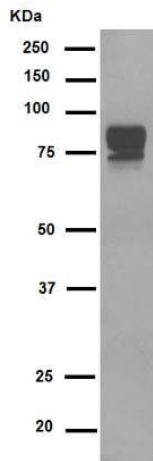
Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 70 kDa

Observed band size: 95 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Western blot - Anti-CD105 antibody [EPR10145-12] (ab169545)

Anti-CD105 antibody [EPR10145-12] (ab169545) at 1/1200 dilution (purified) + ECV-304 cell lysate at 10 µg

Secondary

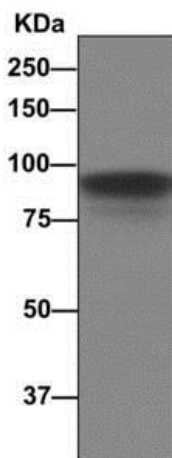
Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 70 kDa

Observed band size: 95 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



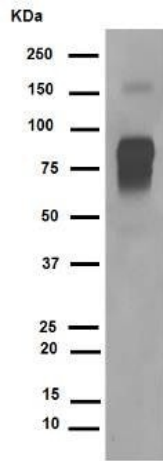
Western blot - Anti-CD105 antibody [EPR10145-12] (ab169545)

Anti-CD105 antibody [EPR10145-12] (ab169545) at 1/1000 dilution (unpurified) + immunoprecipitation pellet from ECV-304 cell lysate

Secondary

HRP-conjugated anti-rabbit IgG preferentially detecting the non-reduced form of rabbit IgG

Predicted band size: 70 kDa



Western blot - Anti-CD105 antibody [EPR10145-12] (ab169545)

Anti-CD105 antibody [EPR10145-12] (ab169545) at 1/50 dilution (unpurified) + HUVEC cell lysate at 10 μ g

Secondary

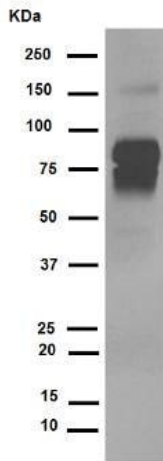
Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 70 kDa

Observed band size: 95 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Western blot - Anti-CD105 antibody [EPR10145-12] (ab169545)

Anti-CD105 antibody [EPR10145-12] (ab169545) at 1/1200 dilution (purified) + HUVEC cell lysate at 10 μ g

Secondary

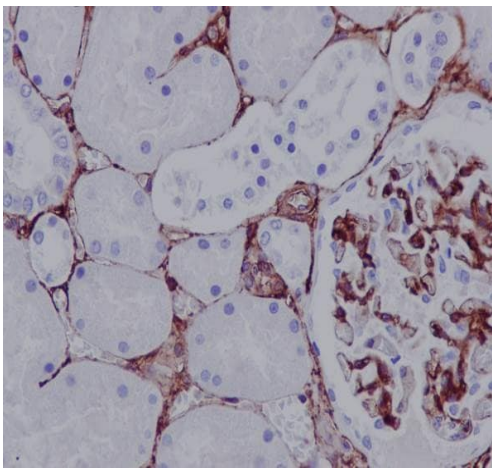
Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 70 kDa

Observed band size: 95 kDa

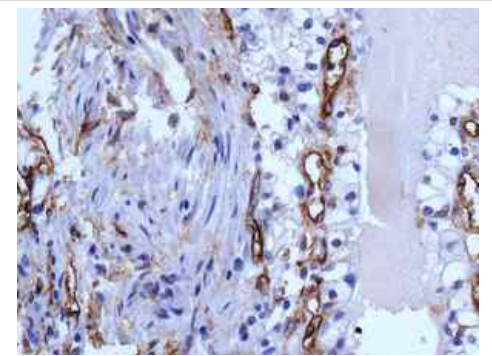
Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



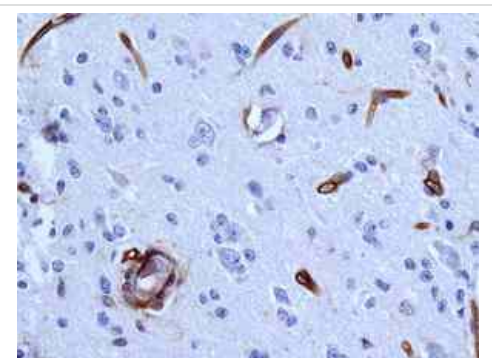
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD105 antibody [EPR10145-12] (ab169545)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue labelling CD105 with purified ab169545 at 1/900. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit IgG was used as the secondary antibody. Counterstained with hematoxylin.



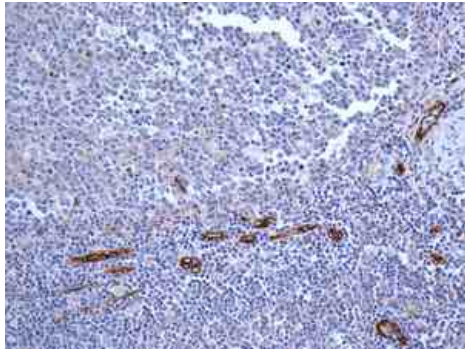
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD105 antibody [EPR10145-12] (ab169545)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis human clear cell carcinoma tissue labelling CD105 with unpurified ab169545 at 1/250.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD105 antibody [EPR10145-12] (ab169545)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human glioma tissue labelling CD105 with unpurified ab169545 at 1/250.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling CD105 with unpurified ab169545 at 1/250.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD105 antibody [EPR10145-12] (ab169545)

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 [EPR10145-12] (ab169545)

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

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