# abcam

# Product datasheet

# Anti-CD105 antibody [EPR10145-12] - BSA and Azide free ab271922





# 7 Images

#### Overview

**Product name** Anti-CD105 antibody [EPR10145-12] - BSA and Azide free

**Description** Rabbit monoclonal [EPR10145-12] to CD105 - BSA and Azide free

**Host species** Rabbit

**Tested applications** Suitable for: WB, IHC-P

Species reactivity Reacts with: Human

Recombinant fragment corresponding to Human CD105 aa 1-200. **Immunogen** 

Database link: P17813

Positive control WB: ECV-304 and HUVEC cell lysates, human tonsil tissue lysate and immunoprecipitation pellet

from ECV-304 cell lysate. IHC-P: Human glioma, clear cell carcinoma, tonsil and kidney tissues.

ab271922 is the carrier-free version of ab169545. **General notes** 

> 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 cellbased 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<sup>®</sup> 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.

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#### **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

ClonalityMonoclonalClone numberEPR10145-12

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab271922 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. Predicted molecular weight: 70 kDa. For unpurified use at 1/50.
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.  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.

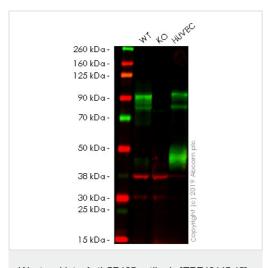
**Tissue specificity** Endoglin is restricted to endothelial cells in all tissues except bone marrow.

**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.



Western blot - Anti-CD105 antibody [EPR10145-12]
- BSA and Azide free (ab271922)

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

Lane 1: Wild-type HeLa cell lysate

Lane 2: CD105 knockout HeLa whole cell lysate

Lane 3: HUVEC whole cell lysate

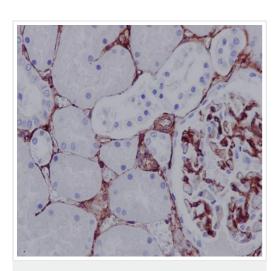
Lysates/proteins at 20 µg per lane.

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab169545).

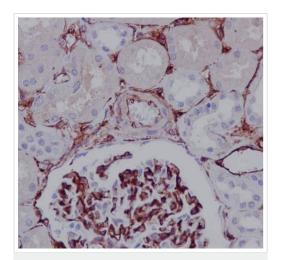


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD105 antibody

[EPR10145-12] - BSA and Azide free (ab271922)

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 lgG was used as the secondary antibody. Counterstained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab169545).

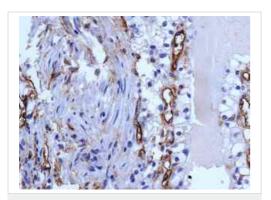


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD105 antibody

[EPR10145-12] - BSA and Azide free (ab271922)

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 lgG was used as the secondary antibody. Counterstained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab169545).

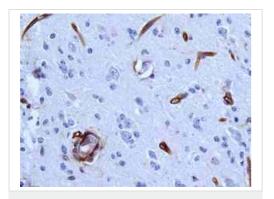


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD105 antibody

[EPR10145-12] - BSA and Azide free (ab271922)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab169545).

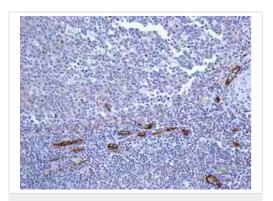


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD105 antibody

[EPR10145-12] - BSA and Azide free (ab271922)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab169545).

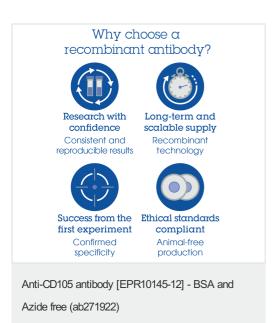


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD105 antibody

[EPR10145-12] - BSA and Azide free (ab271922)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab169545).



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