

Product datasheet

Anti-5T4 antibody [EPR5529] ab134162

Recombinant **RabMAb**

[5 References](#) [8 Images](#)

Overview

Product name	Anti-5T4 antibody [EPR5529]
Description	Rabbit monoclonal [EPR5529] to 5T4
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P Unsuitable for: Flow Cyt, ICC/IF or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human 5T4 aa 100-200 (extracellular). The exact sequence is proprietary. Database link: Q13641
Positive control	WB: HT-29, HT-1376, and Caco-2 cell lysates. IHC-P: Human placenta and endometrial cancer tissues.
General notes	Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

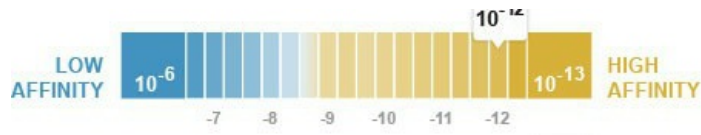
Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb[®] patents](#).

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.

This product is a [recombinant rabbit monoclonal antibody](#).

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. Avoid freeze / thaw cycle.
Dissociation constant (K_D)	K _D = 1.50 x 10 ⁻¹² M



[Learn more about K_D](#)

Storage buffer	pH: 7.40 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR5529
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab134162** 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		1/1000 - 1/10000. Predicted molecular weight: 46 kDa. For unpurified use at 1/500.
IHC-P		1/1000. For unpurified use at 1/100.

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

Target

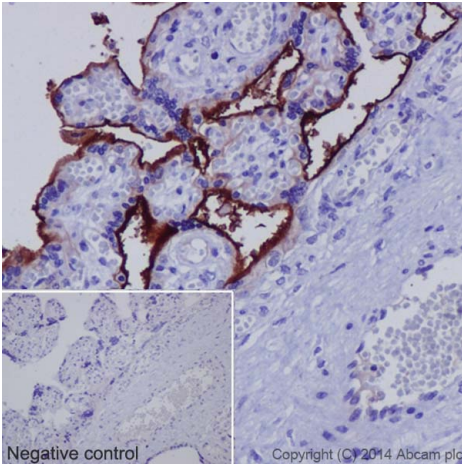
Tissue specificity Expressed by all types of trophoblasts as early as 9 weeks of development. Specific for trophoblastic cells except for amniotic epithelium. In adult tissues, the expression is limited to a few epithelial cell types but is found on a variety of carcinoma.

Sequence similarities Contains 6 LRR (leucine-rich) repeats.
Contains 1 LRRCT domain.
Contains 1 LRRNT domain.

Cellular localization Membrane.

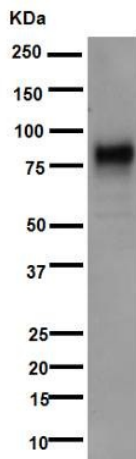
Form 5T4 is a 72 kDa transmembrane glycoprotein that exhibits restricted expression in human and mouse adult tissues, is upregulated on many carcinomas and tumour expression correlates with poorer clinical outcome in ovarian, gastric and colorectal cancers. mES cells lack cell surface expression of the 5T4 antigen, and both protein and mRNA are rapidly upregulated following induction of differentiation. This proteins expression correlates with downregulation of OCT-4 and Tra-1–60 (Ward et al., 2006).

Images



Immunohistochemical staining using ab134162 on paraffin embedded human placenta tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-5T4 antibody [EPR5529] (ab134162)



Anti-5T4 antibody [EPR5529] (ab134162) at 1/500 dilution (unpurified) + HT-29 cell lysate at 20 µg

Secondary

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

Predicted band size: 46 kDa

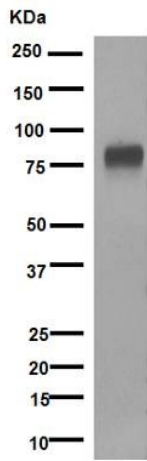
Observed band size: 72-80 kDa

[why is the actual band size different from the predicted?](#)

Western blot - Anti-5T4 antibody [EPR5529] (ab134162)

Blocking buffer and concentration: 5% NFDN/TBST.

Diluting buffer and concentration: 5% NFDN /TBST.



Western blot - Anti-5T4 antibody [EPR5529] (ab134162)

Anti-5T4 antibody [EPR5529] (ab134162) at 1/5000 dilution (purified) + HT-29 cell lysate at 20 µg

Secondary

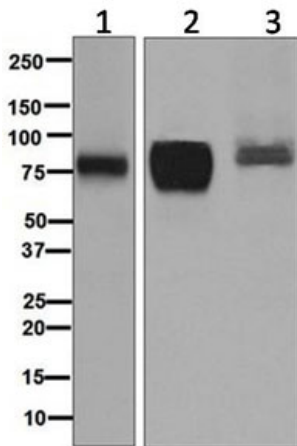
Peroxidase conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 46 kDa

Observed band size: 72-80 kDa [why is the actual band size different from the predicted?](#)

Blocking buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm /TBST.



Western blot - Anti-5T4 antibody [EPR5529] (ab134162)

All lanes : Anti-5T4 antibody [EPR5529] (ab134162) at 1/1000 dilution (unpurified format)

Lane 1 : HT-29 cell lysates

Lane 2 : HT-1376 cell lysates

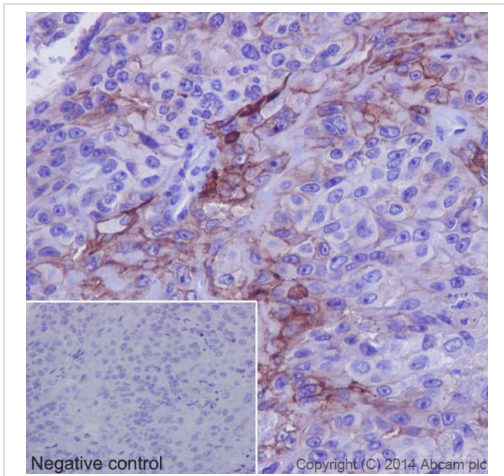
Lane 3 : Caco-2 cell lysates

Lysates/proteins at 10 µg per lane.

Secondary

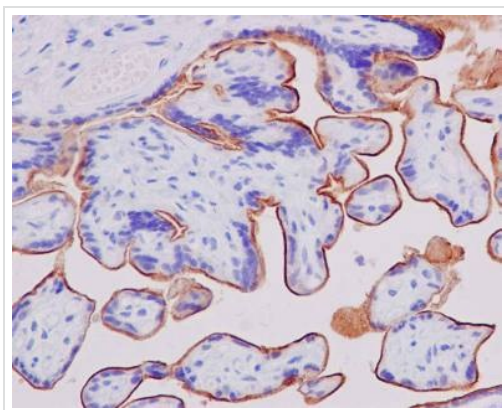
All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 46 kDa



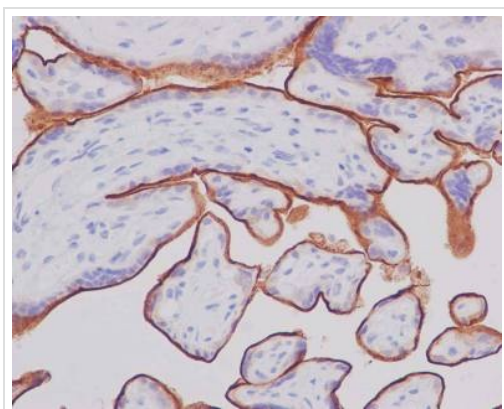
Immunohistochemical staining using ab134162 on paraffin embedded human endometrial cancer.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-5T4 antibody [EPR5529] (ab134162)



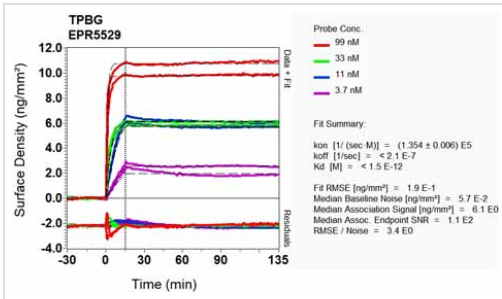
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human placenta tissue labelling 5T4 with unpurified ab134162 at 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit IgG was used as the secondary antibody. Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-5T4 antibody [EPR5529] (ab134162)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human placenta tissue labelling 5T4 with purified ab134162 at 1/1000. 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. Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-5T4 antibody [EPR5529] (ab134162)



Other - Anti-5T4 antibody [EPR5529] (ab134162)

Equilibrium disassociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

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