


## Product datasheet

### Anti-CD90 / Thy1 antibody [EPR3132] $\alpha$ b92574

KO VALIDATED Recombinant RabMAb

★★★★★ 6 Abreviews 64 References 12 Images

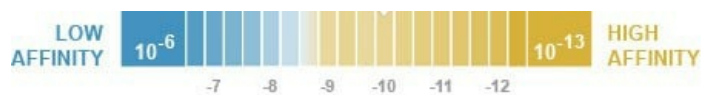
#### Overview

Product name	Anti-CD90 / Thy1 antibody [EPR3132]
Description	Rabbit monoclonal [EPR3132] to CD90 / Thy1
Host species	Rabbit
Specificity	This antibody reacts with mouse samples in WB, but does not work on mouse samples in other applications. Rat cross-reactivity has been tested by western blot only.
Tested applications	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> Flow Cyt or IP
Species reactivity	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Rat 
Immunogen	Synthetic peptide corresponding to Human CD90/ Thy1 aa 50-150 (N terminal). Database link: <b>P04216</b>
Positive control	WB: Wild-type U-2 OS cell lysate, Human fetal brain and fetal kidney lysate. IHC-P: Human lung adenocarcinoma, cervical carcinoma, breast carcinoma, colon carcinoma, glioma, tonsil and brain tissues, human skeletal muscle vessels tissue and normal human tonsil vessels tissues.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <b><a href="#">see here</a></b> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <b><a href="#">RabMAb<sup>®</sup> patents</a></b> .

#### Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K <sub>D</sub> )	K <sub>D</sub> = 1.57 x 10 <sup>-10</sup> M





[Learn more about K<sub>D</sub>](#)

<b>Storage buffer</b>	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3132
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab92574 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

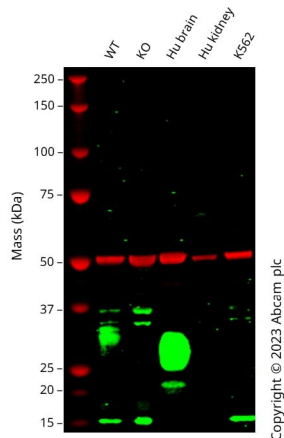
Application	Abreviews	Notes
<b>WB</b>		1/1000 - 1/2000. Predicted molecular weight: 18 kDa. Can be blocked with <a href="#">ab134486</a> .  Observed molecular weight may vary depending on the glycosylation level of the target.
<b>IHC-P</b>	★★★★★ (6)	1/100 - 1/400. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol. The use of an HRP/AP polymerized antibody is recommended for a secondary antibody.

**Application notes** Is unsuitable for Flow Cyt or IP.

## Target

<b>Function</b>	May play a role in cell-cell or cell-ligand interactions during synaptogenesis and other events in the brain.
<b>Sequence similarities</b>	Contains 1 Ig-like V-type (immunoglobulin-like) domain.
<b>Cellular localization</b>	Cell membrane.

## Images



Western blot - Anti-CD90 / Thy1 antibody  
[EPR3132] (ab92574)

**All lanes :** Anti-CD90 / Thy1 antibody [EPR3132] (ab92574) at 1/1000 dilution

**Lane 1 :** Wild-type U-2 OS cell lysate

**Lane 2 :** THY1 knockout U-2 OS cell lysate

**Lane 3 :** Human brain cell lysate

**Lane 4 :** Human kidney cell lysate

**Lane 5 :** K562 cell lysate

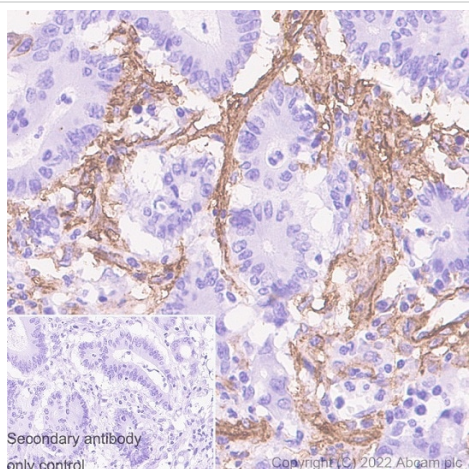
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 18 kDa

**Observed band size:** 25-37 kDa

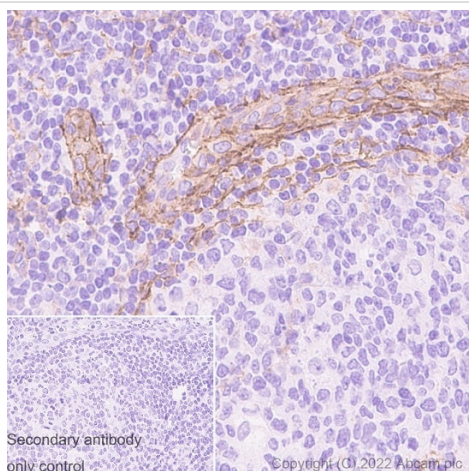
Anti-THY1 antibody [EPR3132] (ab92574) staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] ([ab7291](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab92574 was shown to bind specifically to THY1. A band was observed at 25-37 kDa in wild-type U-2 OS cell lysates with no signal observed at this size in THY1 knockout cell line [ab262490](#) (knockout cell lysate [ab263925](#)). To generate this image, wild-type and THY1 knockout U-2 OS cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween<sup>®</sup> 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD90 / Thy1 antibody [EPR3132] (ab92574)

Immunohistochemical analysis of paraffin-embedded Human colon carcinoma tissue labelling CD90 / Thy1 with ab92574 at 1/400 dilution (0.26 µg/ml) followed by Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) secondary antibody at a ready to use concentration. Positive staining on the stroma in human colon carcinoma. The section was incubated with ab92574 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

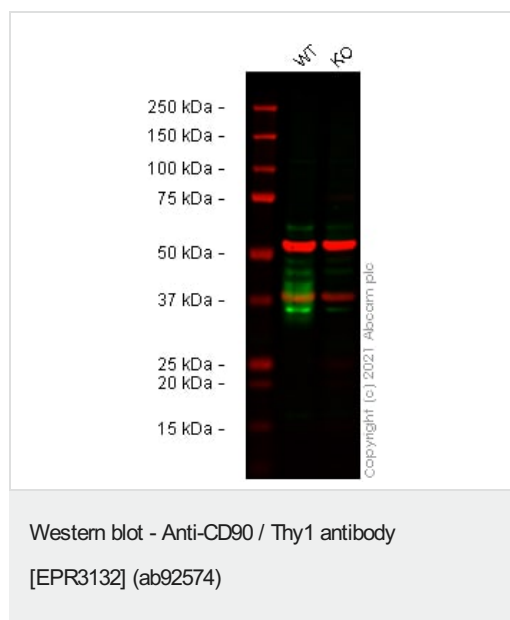
Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) for 20 minutes.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD90 / Thy1 antibody [EPR3132] (ab92574)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labelling CD90 / Thy1 with ab92574 at 1/400 dilution (0.26 µg/ml) followed by Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) secondary antibody at a ready to use concentration. Positive staining on human tonsil. The section was incubated with ab92574 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) for 20 minutes.



**All lanes :** Anti-CD90 / Thy1 antibody [EPR3132] (ab92574) at 1/500 dilution

**Lane 1 :** Wild-type U-2 OS cell lysate

**Lane 2 :** THY1 knockout U-2 OS cell lysate

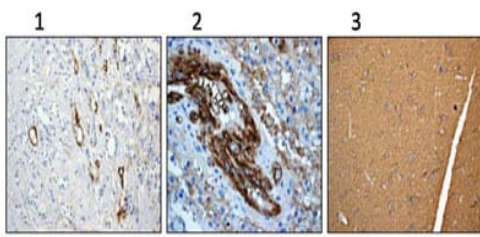
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 18 kDa

**Observed band size:** 35-45 kDa

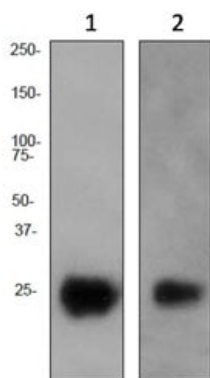
False colour image of Western blot: Anti-CD90 / Thy1 antibody [EPR3132] staining at 1/500 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] ([ab7291](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab92574 was shown to bind specifically to CD90 / Thy1. A band was observed at 35-45 kDa in wild-type U-2 OS cell lysates with no signal observed at this size in Thy1 knockout cell line [ab262490](#) (knockout cell lysate [ab263925](#)). To generate this image, wild-type and Thy1 knockout U-2 OS cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD90 / Thy1 antibody [EPR3132] (ab92574)

ab92574 at 1/100 dilution staining CD90 / Thy1 in (1) Human breast carcinoma, (2) Human glioma & (3) Human brain tissue by Immunohistochemistry Formalin-fixed, Paraffin-embedded tissue. Detection: DAB staining.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Western blot - Anti-CD90 / Thy1 antibody [EPR3132] (ab92574)

**All lanes :** Anti-CD90 / Thy1 antibody [EPR3132] (ab92574) at 1/1000 dilution

**Lane 1 :** Human fetal brain lysate

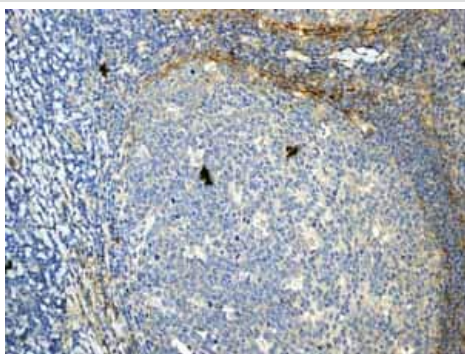
**Lane 2 :** Human fetal kidney lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

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

**Predicted band size:** 18 kDa

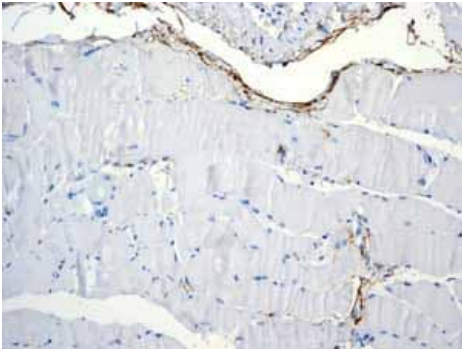


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD90 / Thy1 antibody [EPR3132] (ab92574)

ab92574 showing positive staining in Normal human tonsil vessels tissue.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.

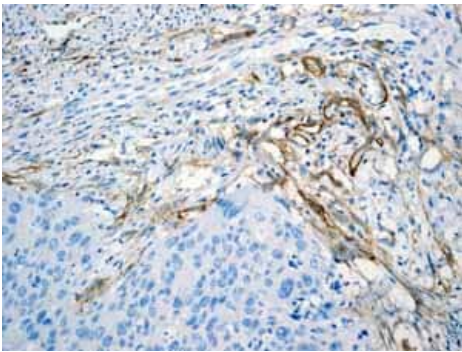




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD90 / Thy1 antibody [EPR3132] (ab92574)

ab92574 showing positive staining in human Skeletal muscle vessels tissue.

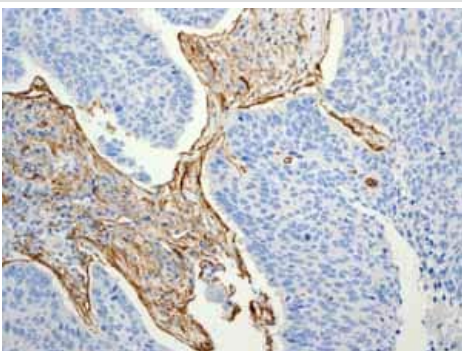
Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD90 / Thy1 antibody [EPR3132] (ab92574)

ab92574 showing positive staining in human Cervical carcinoma tissue.

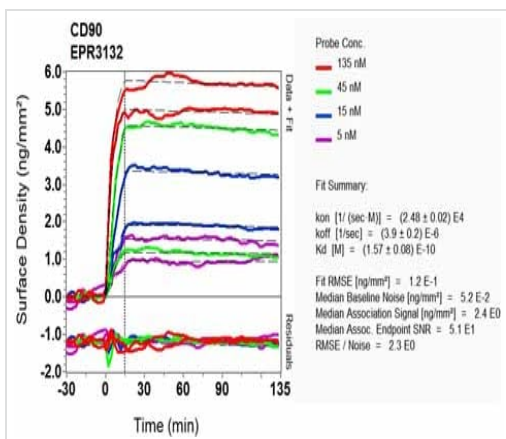
Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD90 / Thy1 antibody [EPR3132] (ab92574)

ab92574 showing positive staining in human Lung adenocarcinoma tissue.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



SPR Scanning - Anti-CD90 / Thy1 antibody

[EPR3132] (ab92574)

Equilibrium dissociation constant ( $K_D$ )

Learn more about  $K_D$

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

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-CD90 / Thy1 antibody [EPR3132] (ab92574)

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

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.



## Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors