abcam

Product datasheet

Anti-CD90 / Thy1 antibody [EPR3133] - Low endotoxin, Azide free ab216449

KO VALIDATED | Recombinant | RabMAb

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Overview

Product name	Anti-CD90 / Thy1 antibody [EPR3133] - Low endotoxin, Azide free
Description	Rabbit monoclonal [EPR3133] to CD90 / Thy1 - Low endotoxin, Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF **Unsuitable for:** Flow Cyt or IP
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC: Human tonsil tissue; WB: Human glioma and brain tissue lysate; ICC/IF: Jurkat cells.
General notes	ab216449 is the carrier-free version of **ab133350**. 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 cell-based 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 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**. Our **Low endotoxin, azide-free formats** have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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	EPR3133
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab216449 in the following tested applications.

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

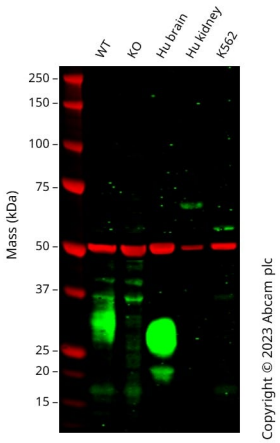
Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 17 kDa. Observed molecular weight may vary depending on the glycosylation level of the target.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

Application notes Is unsuitable for Flow Cyt or IP.

Target

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

Images



Western blot - Anti-CD90 / Thy1 antibody [EPR3133] - Low endotoxin, Azide free (ab216449)

All lanes : Anti-CD90 / Thy1 antibody [EPR3133] (**ab133350**) at 1/2000 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

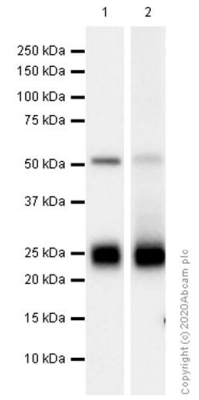
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 17 kDa
Observed band size: 25-37 kDa

This data was developed using **ab133350**, the same antibody clone in a different buffer formulation.

Anti-THY1 antibody [EPR3133] (**ab133350**) staining at 1/2000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] (**ab7291**) loading control staining at 1/20000 dilution, shown in red. In Western blot, **ab133350** 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® 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.



Western blot - Anti-CD90 / Thy1 antibody [EPR3133] - Low endotoxin, Azide free (ab216449)

All lanes : Anti-CD90 / Thy1 antibody [EPR3133] (**ab133350**) at 1/1000 dilution (Purified)

Lane 1 : Human glioma lysate
Lane 2 : Human brain lysate

Lysates/proteins at 15 µg per lane.

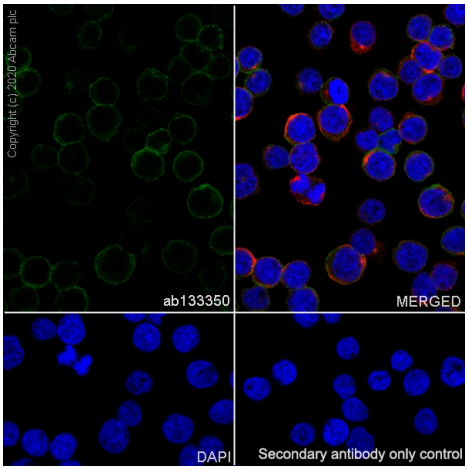
Secondary
All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 17 kDa
Observed band size: 25-35 kDa

This data was developed using **ab133350**, the same antibody clone in a different buffer formulation.

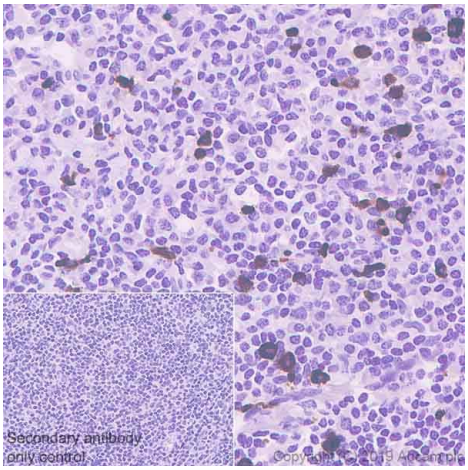
The molecular weight observed is consistent with what has been described in the literature (PMID: 24116172 and PMID: 30177788).

Blocking Buffer and concentration: 5% NFDM/TBST



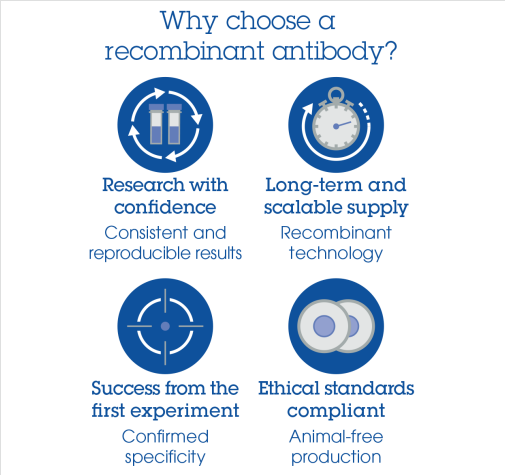
Immunocytochemistry/ Immunofluorescence - Anti-CD90 / Thy1 antibody [EPR3133] - Low endotoxin, Azide free (ab216449)

This data was developed using **ab133350**, the same antibody clone in a different buffer formulation.
Immunocytochemistry analysis of Jurkat (Human T cell leukemia T lymphocyte) cells labeling CD90 / Thy1 with Purified ab216449 at 1:50 dilution (2.44 ?g/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD90 / Thy1 antibody [EPR3133] - Low endotoxin, Azide free (ab216449)

This data was developed using **ab133350**, the same antibody clone in a different buffer formulation.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue sections labeling CD90 / Thy1 with Purified ab216449 at 1:4000 dilution (0.03 µg/ml). Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



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