abcam

Product datasheet

Anti-CD90 / Thy1 antibody [EPR28145-53] ab307736





重组 RabMAb

2 References 12 图像

概述

产品名称 Anti-CD90 / Thy1抗体[EPR28145-53]

描述 兔单克隆抗体[EPR28145-53] to CD90 / Thy1

宿主 Rabbit

经测试应用 适用于: WB, ICC/IF, Flow Cyt, IP

不适用于: IHC-P

种属反应性 与反应: Mouse, Rat, Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: U-2 OS, HuT-78, PC-12 and EL4 whole cell lysate. Human spleen tissue lysate. Mouse and

rat brain tissue lysate. ICC/IF: U-2 OS, EL4 and PC-12 cells. Flow Cyt: Mouse peripheral blood

mononuclear cells. U-2 OS and PC-12 cells. IP: HuT-78 and U-2 OS whole cell lysate.

常规说明 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**.

性能

形式

存放说明 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.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

克隆 单克隆

克隆编号 EPR28145-53

应用

The Abpromise guarantee Abpromise™承诺保证使用ab307736于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/1000 - 1/5000. Predicted molecular weight: 17 kDa. Observed molecular weight may vary depending on the glycosylation level of the target.
ICC/IF		1/250 - 1/1000.
Flow Cyt		1/500.
IP		1/30.

应用说明

Is unsuitable for IHC-P.

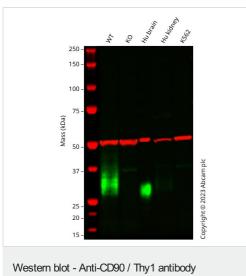
靶标

功能 May play a role in cell-cell or cell-ligand interactions during synaptogenesis and other events in the

序列相似性 Contains 1 lg-like V-type (immunoglobulin-like) domain.

细胞定位 Cell membrane.

图片



[EPR28145-53] (ab307736)

All lanes: Anti-CD90 / Thy1 antibody [EPR28145-53] (ab307736)

at 1/5000 dilution

Lane 1: Wild-type U-2 OS cell lysate at 30 µg

Lane 2: THY1 knockout U-2 OS cell lysate at 30 µg

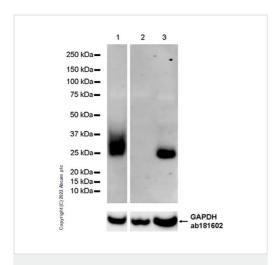
Lane 3: Human brain cell lysate at 2 µg

Lane 4: Human kidney cell lysate at 20 µg

Lane 5: K562 cell lysate at 30 µg

Performed under reducing conditions.

Predicted band size: 17 kDa Observed band size: 25-37 kDa Western blot: Anti-THY1 antibody [EPR28145-53] (ab307736) staining at 1/5000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] (ab7291) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab307736 was shown to bind specifically to THY1. A band was observed at 25-37 kDa in wildtype 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 [EPR28145-53] (ab307736)

All lanes : Anti-CD90 / Thy1 antibody [EPR28145-53] (ab307736) at 1/1000 dilution

Lane 1 : U-2 OS (human bone osteosarcoma epithelial cell) whole cell lysate

Lane 2: K-562 (human chronic myelogenous leukemia lymphoblast) whole cell lysate

Lane 3: EL4 (mouse lymphoma t lymphocyte) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) at 1/20000 dilution

Predicted band size: 17 kDa

Observed band size: 25-37 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

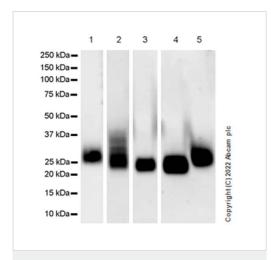
Negative control: K-562 (PMID: 7683034).

The molecular weight observed is consistent with what has been described in the literature (PMID: 16770003).

In Western blot, anti-GAPDH antibody (<u>ab181602</u>) loading control staining at 1/200, 000 dilution.

This blot was developed using a high sensitivity ECL substrate.

Exposure time: 103 seconds.



Western blot - Anti-CD90 / Thy1 antibody [EPR28145-53] (ab307736)

All lanes : Anti-CD90 / Thy1 antibody [EPR28145-53] (ab307736)

at 1/1000 dilution

Lane 1: Human spleen tissue lysate

Lane 2: HuT-78 (human sezary syndrome cutaneous t lymphocyte)

whole cell lysate

Lane 3: Mouse brain tissue lysate

Lane 4: Rat brain tissue lysate

Lane 5: PC-12 (rat adrenal gland pheochromocytoma cell) whole

cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated

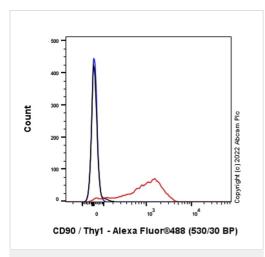
(ab97051) at 1/20000 dilution

Predicted band size: 17 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

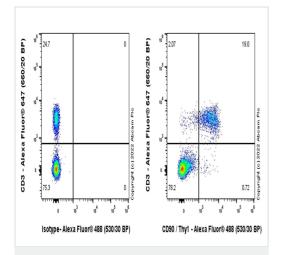
The molecular weight observed is consistent with what has been described in the literature (PMID: 16770003) and due to the highglycosylation of the protein.

Exposure time: 48 seconds.



Flow Cytometry - Anti-CD90 / Thy1 antibody [EPR28145-53] (ab307736)

Flow cytometric analysis of PC-12 (rat adrenal gland pheochromocytoma) cells labeling CD90 / Thy1 with ab307736 at 1/500 dilution (0.1µg) (Red) compared with a Rabbit monoclonal lgG isotype control (ab172730) (Black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat Anti-Rabbit lgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody. Gated on viable cells.

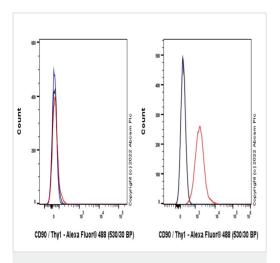


Flow Cytometry - Anti-CD90 / Thy1 antibody [EPR28145-53] (ab307736)

Flow cytometric analysis of Rabbit monoclonal IgG isotype control ($\underline{ab172730}$) (Left panel) compared to mouse peripheral blood mononuclear cell (PBMC) (Right panel) labeling CD90 / Thy1 with ab307736 at 1/500 dilution (0.1 µg). Goat Anti-Rabbit IgG (Alexa Fluor® 488, $\underline{ab150081}$) at 1/2000 dilution was used as the secondary antibody.

Cells were stained with rabbit lgG or ab307736 then stained with anti-CD3 conjugated to Alexa Fluor® 647.

Gated on viable cells.

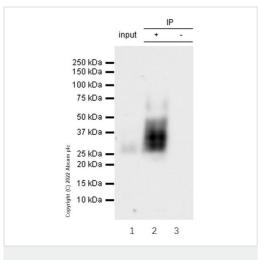


Flow Cytometry - Anti-CD90 / Thy1 antibody [EPR28145-53] (ab307736)

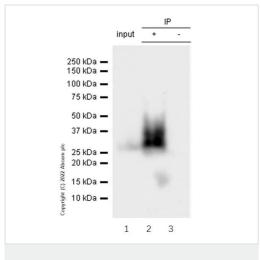
Flow cytometric analysis of K-562 (human chronic myelogenous leukemia lymphoblast) (Left panel) compared to U-2 OS (human bone osteosarcoma epithelial cell) (Right panel) labeling CD90 / Thy1 with ab307736 at 1/500 dilution (0.1 µg) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.

Negative control: K-562.

Gated on viable cells.



Immunoprecipitation - Anti-CD90 / Thy1 antibody [EPR28145-53] (ab307736)



Immunoprecipitation - Anti-CD90 / Thy1 antibody [EPR28145-53] (ab307736) CD90 / Thy1 was immunoprecipitated from 0.35 mg HuT-78 (human sezary syndrome cutaneous t lymphocyte) whole cell lysate 10 μ g with ab307736 at 1/30 dilution (2 μ g in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab307736 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: HuT-78 whole cell lysate 10 µg

Lane 2: ab307736 IP in HuT-78 whole cell lysate

Lane 3: Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab307736 in HuT-78 whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure time: 15 seconds.

The molecular weight observed is consistent with what has been described in the literature (PMID: 16770003) and due to the high glycosylation of the protein.

CD90 / Thy1 was immunoprecipitated from 0.35 mg U-2 OS (human bone osteosarcoma epithelial cell) whole cell lysate 10 μ g with ab307736 at 1/30 dilution (2 μ g in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab307736 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP) (ab131366) was used at 1/5000 dilution.

Lane 1: U-2 OS whole cell lysate 10 µg

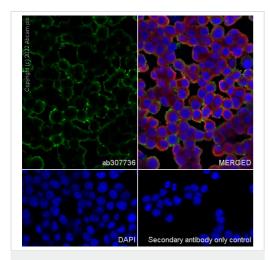
Lane 2: ab307736 IP in U-2 OS whole cell lysate

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab307736 in HU-2 OS whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 15 seconds.

The molecular weight observed is consistent with what has been described in the literature (PMID: 16770003) and due to the high glycosylation of the protein.



Immunocytochemistry/ Immunofluorescence - Anti-CD90 / Thy1 antibody [EPR28145-53] (ab307736)

ab307736 MERGED

Immunocytochemistry/ Immunofluorescence - Anti-CD90 / Thy1 antibody [EPR28145-53] (ab307736)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized PC-12 (rat adrenal gland pheochromocytoma small irregularly shaped cells) cells labeling CD90 / Thy1 with ab307736 at 1/250 dilution (1.8 μg/ml) followed by **ab150081** Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (2 μg/ml) (Green). Confocal image showing membranous and cytoplasmic staining in PC-12 cell line.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (2.5 μ g/ml) (Red). The nuclear counterstain was DAPI (Blue).

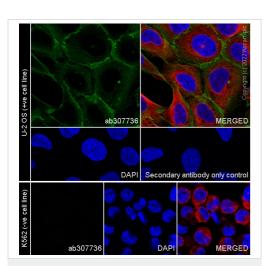
Secondary antibody only control: Secondary antibody is <u>ab150081</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 μ g/ml).

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized EL4 (mouse lymphoma T lymphocyte) cells labeling CD90 / Thy1 with ab307736 at 1/250 dilution (1.8 μ g/ml) followed by <u>ab150081</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (2 μ g/ml) (Green).

Confocal image showing membranous and cytoplasmic staining in EL4 cell line.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (2.5 μ g/ml) (Red). The nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150081**Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 µg/ml).



Immunocytochemistry/ Immunofluorescence - Anti-CD90 / Thy1 antibody [EPR28145-53] (ab307736)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-2 OS (human bone osteosarcoma epithelial cell) cells labeling CD90 / Thy1 with ab307736 at 1/250 dilution (1.8 μ g/ml) followed by **ab150081** Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (2 μ g/ml) (Green).

Confocal image showing membranous and cytoplasmic staining in U-2 OS cell line, no staining was observed in K-562 cell line.

Negative control: K-562 (PMID: 7683034).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (2.5 μ g/ml) (Red). The nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (2 µg/ml).



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