# abcam

### Product datasheet

## Anti-CD147 antibody [MEM-M6/1] ab666



★★★★★ 5 Abreviews 34 References 画像数 5

#### 製品の概要

製品名 Anti-CD147 antibody [MEM-M6/1]

製品の詳細 Mouse monoclonal [MEM-M6/1] to CD147

由来種 Mouse

特異性 Human CD147 antigen. This antibody recognizes an epitope in the N-terminal lg domain (D1).

This high-affinity antibody is capable of binding to unstimulated peripheral blood T cells.

アプリケーション 適用あり: IHC-P, Flow Cyt, WB, IP

種交差性 交差種: Human

免疫原 Recombinant full length protein corresponding to Human CD147. Purified soluble recombinant

form of CD147, CD147Rg, which consists of the cDNA coding for the hinge region, CH2-and

CH3 domain of human lgG1 (CD147Rg is secreted by transfectants as a dimer).

Database link: P35613

ポジティブ・コントロール This antibody gave a positive result in IHC in the following FFPE tissue: Human normal heart

muscle. Flow Cytometry: A549 cells and Peripheral blood lymphocytes. WB: A549, Raji and

Jurkat.

特記事項 This product was changed from ascites to tissue culture supernatant on 24th January 2018.

Please note that the dilutions may need to be adjusted accordingly. If you have any questions,

please do not hesitate to contact our scientific support team.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies

and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

**バッファー** pH: 7.40

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Preservative: 0.097% Sodium azide

Constituent: PBS

精製度 Protein A purified

特記事項(精製) Purified from TCS. Purity >95% by SDS-PAGE.

**ポリモノ** モノクローナル **クローン名** MEM-M6/1

アイソタイプ IgG1

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab666の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P	<b>★★★</b> ★★ (3)	Use a concentration of 10 μg/ml.
Flow Cyt		Use a concentration of 10 $\mu$ g/ml. <u>ab170190</u> - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
WB	<b>★★★★ (1)</b>	Use a concentration of 1 µg/ml. Use under non reducing condition.
IP		Use at an assay dependent concentration.

## ターゲット情報

機能
Plays pivotal roles in spermatogenesis, embryo implantation, neural network formation and tumor progression. Stimulates adjacent fibroblasts to produce matrix metalloproteinases (MMPS). May target monocarboxylate transporters SLC16A1, SLC16A3 and SLC16A8 to plasma membranes of retinal pigment epithelium and neural retina. Seems to be a receptor for oligomannosidic glycans. In vitro, promotes outgrowth of astrocytic processes.

組織特異性 Present only in vascular endothelium in non-neoplastic regions of the brain, whereas it is present

in tumor cells but not in proliferating blood vessels in malignant gliomas.

配列類似性 Contains 1 Ig-like C2-type (immunoglobulin-like) domain.

Contains 1 lg-like V-type (immunoglobulin-like) domain.

翻訳後修飾 N-glycosylated.

**細胞内局在** Cell membrane. Melanosome. Colocalizes with SLC16A1 and SLC16A8 (By similarity). Identified

by mass spectrometry in melanosome fractions from stage I to stage IV.

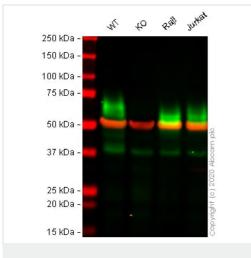
#### 画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD147 antibody [MEM-M6/1] (ab666)

IHC image of CD147 staining in human normal heart muscle formalin fixed paraffin embedded tissue section, performed on a Leica BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6, epitope retrieval solution 1) for 20 minutes. The section was then incubated with ab666, 5 µg/ml, for 15 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Western blot - Anti-CD147 antibody [MEM-M6/1] (ab666)

All lanes: Anti-CD147 antibody [MEM-M6/1] (ab666) at 1 µg/ml

Lane 1: Wild-type A549 cell lysate

Lane 2: BSG knockout A549 cell lysate

Lane 3 : Raji cell lysate

Lane 4 : Jurkat cell lysate

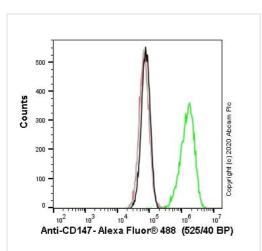
Lysates/proteins at 30 µg per lane.

Performed under reducing conditions.

Observed band size: 55-70 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab666 observed at 55-70 kDa. Red - loading control ab52866 (Rabbit anti-alpha Tubulin antibody [EP1332Y]) observed at 55kDa. ab666 was shown to react with CD147 in wild-type A549 cells in western blot with loss of signal observed in BSG knockout cell line ab273748 (knockout cell lysate ab275500). Wild-type and BSG knockout A549 cell lysates were subjected to SDS-PAGE. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with ab666 and ab52866 (Rabbit anti-alpha Tubulin antibody [EP1332Y]) overnight at 4°C at 1 µg/ml and a 1 in 20000 dilution respectively. Blots were incubated

with Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed (**ab216772**) and Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed (**ab216777**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



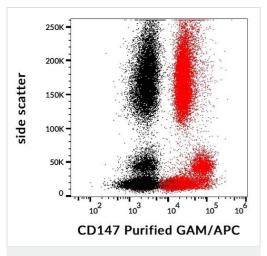
Flow Cytometry - Anti-CD147 antibody [MEM-M6/1] (ab666)

Flow cytometry overlay histogram showing wild-type A549 (green line) and BSG knockout A549 cells (<u>ab273748</u>) stained with ab666 (red line). The cells were incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab666) (1x10<sup>6</sup> in 100 $\mu$ l at 10  $\mu$ g/ml) for 30 min at 4°C.

The secondary antibody Goat anti-mouse IgG H&L (Alexa Fluor<sup>®</sup> 488, pre-adsorbed) (**ab150117**) was used at 1/2000 for 30 min at 4°C.

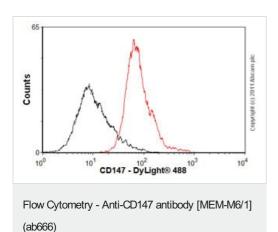
Isotype control antibody was mouse  $\lg G1\kappa$  (ab170190) used at the same concentration and conditions as the primary antibody (wild-type A549 - black line; BSG knockout A549 - grey line). Unlabelled sample was also used as a control (this line is not shown for the purpose of simplicity).

Acquisition of >5000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter.



Flow Cytometry - Anti-CD147 antibody [MEM-M6/1] (ab666)

Flow cytometry of human peripheral blood cells with ab666 at 1  $\ensuremath{\,\text{\mu g/ml}}$ 



Overlay histogram showing peripheral blood lymphocytes stained with ab666 (red line). The cells were incubated with the antibody (ab666, 1  $\mu$ g/1x10<sup>6</sup> cells) for 30 minutes at 4°C. The secondary antibody used was DyLight<sup>®</sup> 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 minutes at 4°C. Isotype control antibody (black line) was mouse lgG1 [ICIGG1] (ab91353, 2  $\mu$ g/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed gating on peripheral blood lymphocytes.

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