# abcam

# Product datasheet

# Anti-CD63 antibody [KILL150A] - BSA and Azide free ab271296



# 7 Images

#### Overview

Product name Anti-CD63 antibody [KILL150A] - BSA and Azide free

**Description** Mouse monoclonal [KILL150A] to CD63 - BSA and Azide free

Host species Mouse

**Specificity** We recommend <u>ab134045</u> for low expression samples.

Tested applications Suitable for: WB, ICC/IF, Flow Cyt, IHC-P

Species reactivity Reacts with: Human

**Immunogen** Tissue, cells or virus. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: SK-MEL-28 and HUVEC whole cell lysate (boiled and un-boiled). Human lymph node tissue

lysate. IHC-P: Human melanoma tissue. ICC/IF: SK-MEL-28 cells. Flow Cyt: SK-MEL-28

**General notes** ab271296 is the carrier-free version of **ab271286**.

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**.

Our <u>carrier-free</u> 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 compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

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

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#### For more information see here.

## **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 KILL150A

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab271296 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: 26 kDa.  |
| ICC/IF      |           | Use at an assay dependent concentration.  |
| Flow Cyt    |           | Use at an assay dependent concentration.  |
| IHC-P       |           | Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |

## **Target**

**Function** This antigen is associated with early stages of melanoma tumor progression. May play a role in

growth regulation.

Tissue specificity Dysplastic nevi, radial growth phase primary melanomas, hematopoietic cells, tissue

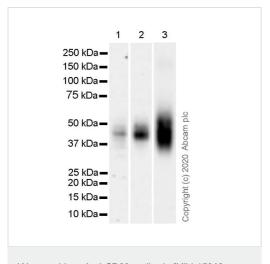
macrophages.

**Sequence similarities** Belongs to the tetraspanin (TM4SF) family.

Cellular localization Cell membrane. Lysosome membrane. Late endosome membrane. Also found in Weibel-Palade

bodies of endothelial cells. Located in platelet dense granules.

#### **Images**



Western blot - Anti-CD63 antibody [KILL150A] - BSA and Azide free (ab271296)

All lanes : Anti-CD63 antibody [KILL150A] ( $\underline{ab271286}$ ) at 0.978  $\mu g/ml$ 

**Lane 1 :** SK-MEL-28 (human malignant melanoma), whole cell lysate

**Lane 2**: HUVEC (human umbilical vein endothelial cell), whole cell lysate

Lane 3: Human lymph node tissue lysate

Lysates/proteins at 10 µg per lane.

#### **Secondary**

**All lanes :** Peroxidase-Conjugated Goat anti-Mouse IgG (H+L) at 1/10000 dilution

Predicted band size: 26 kDa

CD63 can undergo glycosylation as shown in lane 1, 2 and 3 (PMID: 9890706, 28740179).

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure times: Lanes 1-2: 3 mins; Lane 3: 48 secs.

This blot was developed using a higher sensitivity ECL substrate.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab271286).

Sample un-boiled boiled un-boiled 1 2 3 4 5 6

250 kDa — 150 kDa — 100 kDa — 75 kDa — 50 kDa — 20 kDa — 20 kDa — 115 kDa — 115

Western blot - Anti-CD63 antibody [KILL150A] - BSA and Azide free (ab271296)

All lanes: Anti-CD63 antibody [KILL150A] (ab271286) at 1/1000 dilution

**Lanes 1 & 5 :** Un-boiled HUVEC (human umbilical vein endothelial cell) whole cell lysate

Lanes 2 & 6: Un-boiled SK-MEL-28 (human malignant melanoma) whole cell lysate

**Lane 3 :** Boiled HUVEC (human umbilical vein endothelial cell) whole cell lysate

**Lane 4 :** Boiled SK-MEL-28 (human malignant melanoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Peroxidase-Conjugated Goat anti-Mouse IgG (H+L) at 1/5000 dilution

Developed using the ECL technique.

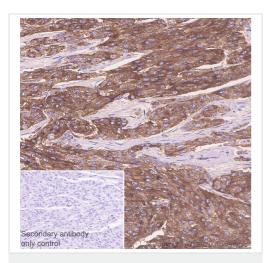
**Predicted band size:** 26 kDa **Observed band size:** 30-60 kDa

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

Exposure time: Lane1-4: 180s; Lane 5-6: 80s

We recommend not boiling lysate before loading onto the gel and using a higher sensitive ECL substrate to increase the band intensity.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab271286).



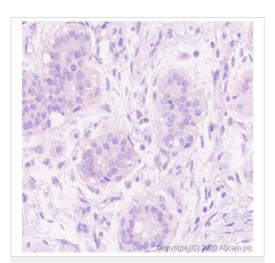
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD63 antibody
[KILL150A] - BSA and Azide free (ab271296)

Immunohistochemical analysis of paraffin-embedded human melanoma tissue labeling CD63 with <u>ab271286</u> at 1/4000 dilution (0.978µg/ml) followed by ready to use Goat Anti-mouse IgG H&L (HRP polymer) (<u>ab214879</u>). Cytoplasmic staining on human melanoma. The section was incubated with <u>ab271268</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use Goat Anti-mouse lgG H&L (HRP polymer) (ab214879).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab271286).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD63 antibody

[KILL150A] - BSA and Azide free (ab271296)

ab271286 MERGED

DAPI -ve control 1 -ve control 2

Immunocytochemistry/ Immunofluorescence - Anti-CD63 antibody [KILL150A] - BSA and Azide free (ab271296)

Immunohistochemical analysis of paraffin-embedded human breast tissue labeling CD63 with <u>ab271286</u> at 1/4000 dilution (0.978µg/ml) followed by ready to use Goat Anti-mouse IgG H&L (HRP polymer) (<u>ab214879</u>). The section was incubated with <u>ab271268</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument. Counterstained with Hematoxylin.

Negative control: Nearly no staining on human breast.

Secondary antibody only control: Secondary antibody is ready to use Goat Anti-mouse IgG H&L (HRP polymer) (ab214879).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab271286).

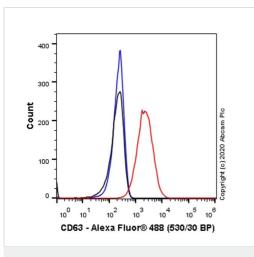
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized SK-MEL-28 cells labelling CD63 with <a href="mailto:ab271286"><u>ab271286</u></a> at 1/50 dilution (19.56µg/ml), followed by <a href="mailto:ab150113"><u>ab150113</u></a> Goat Anti-mouse IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing lysosome/endosomes (<a href="mailto:ab252919"><u>ab252919</u></a>) co-staining in SK-MEL-28 cells.

<u>ab252919</u> Anti-CD63 rabbit monoclonal antibody was used to counterstain tubulin at 1/250 dilution, followed by <u>ab150080</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 594) at a 1/1000 dilution (Red). The nuclear counterstain was DAPI (Blue).

Negative control 1:  $\underline{ab271286}$  at a 1/50 dilution (19.56µg/ml) followed by  $\underline{ab150080}$  at a 1/1000 dilution.

**Negative control 2:** <u>ab259919</u> at a 1/200 dilution followed by <u>ab150113</u> at a 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab271286).



Flow Cytometry - Anti-CD63 antibody [KILL150A] - BSA and Azide free (ab271296)

Flow cytometric analysis of SK-MEL-28 (human malignant melanoma) cells labelling CD63 with <u>ab271286</u> at 1/1000 dilution (19.56µg/ml) (Red) compared with a Rabbit monoclonal lgG (<u>ab172730</u>) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488, <u>ab150077</u>) at 1/2000 dilution was used as the secondary antibody. Gated on viable cells.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab271286).



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