## Overview

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>Anti-CD147 antibody [EPR4052]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Rabbit monoclonal [EPR4052] to CD147</td>
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<tr>
<td><strong>Host species</strong></td>
<td>Rabbit</td>
</tr>
<tr>
<td><strong>Tested applications</strong></td>
<td>Suitable for: WB, IHC-P, ICC/IF</td>
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<tr>
<td><strong>Species reactivity</strong></td>
<td>Reacts with: Mouse, Rat, Human</td>
</tr>
<tr>
<td><strong>Immunogen</strong></td>
<td>Synthetic peptide within Human CD147 aa 150-250 (internal sequence). The exact sequence is proprietary. Database link: P35613</td>
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<tr>
<td><strong>Positive control</strong></td>
<td>WB: A431, HeLa, Jurkat, and HuT-78 cell lysates. IHC-P: Human ovary carcinoma.</td>
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<tr>
<td><strong>General notes</strong></td>
<td>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents</td>
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</table>

**We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.**

This product is a recombinant rabbit monoclonal antibody.

## Properties

<table>
<thead>
<tr>
<th><strong>Form</strong></th>
<th>Liquid</th>
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<tbody>
<tr>
<td><strong>Storage instructions</strong></td>
<td>Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.</td>
</tr>
<tr>
<td><strong>Storage buffer</strong></td>
<td>pH: 7.20</td>
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<tr>
<td></td>
<td>Preservative: 0.01% Sodium azide</td>
</tr>
<tr>
<td></td>
<td>Constituents: 40% Glycerol, 0.05% BSA, 59% PBS</td>
</tr>
<tr>
<td><strong>Purity</strong></td>
<td>Protein A purified</td>
</tr>
<tr>
<td><strong>Clonality</strong></td>
<td>Monoclonal</td>
</tr>
<tr>
<td><strong>Clone number</strong></td>
<td>EPR4052</td>
</tr>
<tr>
<td><strong>Isotype</strong></td>
<td>IgG</td>
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</table>
**Applications**

Our **Abpromise guarantee** covers the use of **ab108317** in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td></td>
<td>1/1000 - 1/10000. Detects a band of approximately 55 kDa (predicted molecular weight: 42 kDa).</td>
</tr>
<tr>
<td>IHC-P</td>
<td>![4 rating]</td>
<td>1/250 - 1/500. See <a href="#">IHC antigen retrieval protocols</a>. Antigen retrieval is recommended.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td></td>
<td>1/50 - 1/100.</td>
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</table>

**Target**

**Function**

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.

**Tissue specificity**

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.

**Sequence similarities**

Contains 1 Ig-like C2-type (immunoglobulin-like) domain.
Contains 1 Ig-like V-type (immunoglobulin-like) domain.

**Post-translational modifications**

N-glycosylated.

**Cellular localization**

Cell membrane. Melanosome. Colocalizes with SLC16A1 and SLC16A8 (By similarity). Identified by mass spectrometry in melanosome fractions from stage I to stage IV.
Anti-CD147 antibody [EPR4052] (ab108317) at 1/1000 dilution (purified) + Rat kidney cell lysate at 10 µg

**Secondary**
Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 42 kDa

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

Anti-CD147 antibody [EPR4052] (ab108317) at 1/1000 dilution (purified) + Mouse kidney lysate at 10 µg

**Secondary**
Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 42 kDa

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

**All lanes:** Anti-CD147 antibody [EPR4052] (ab108317) at 1/1000 dilution (purified)

Lane 1: HeLa cell lysate
Lane 2: Jurkat cell lysate
Lane 3: HuT-78 cell lysate

Lysates/proteins at 20 µg per lane.

**Secondary**
**All lanes:** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 42 kDa
Blocking buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM /TBST.

All lanes: Anti-CD147 antibody [EPR4052] (ab108317) at 1/1000 dilution (unpurified)

Lane 1: A431 cell lysate
Lane 2: HeLa cell lysate
Lane 3: Jurkat cell lysate
Lane 4: HuT-78 cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 42 kDa

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cervix carcinoma tissue labelling CD147 with purified ab108317 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a goat anti-rabbit IgG H&L (HRP) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human ovary carcinoma tissue labelling CD147 with unpurified ab108317 at 1/250.

Immunocytochemistry/Immunofluorescence analysis of Jurkat (human acute T cell leukemia) cells labelling CD147 with purified ab108317 at 1/100. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. ab7291, a mouse anti-tubulin (1/1000) and ab150120, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) were also used.

Control 1: primary antibody (1/100) and secondary antibody, ab150120, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/500).

Control 2: ab7291 (1/1000) and secondary antibody, ab150077, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/500).

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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