

## Product datasheet

# Anti-CD97 antibody [EPR4427] ab108368

Recombinant RabMAb

[9 References](#) [8 Images](#)

### Overview

<b>Product name</b>	Anti-CD97 antibody [EPR4427]
<b>Description</b>	Rabbit monoclonal [EPR4427] to CD97
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt, WB, IP, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Human tonsil, Jurkat, U937, and fetal thymus lysates. IHC: Human spleen, colon adenocarcinoma and tonsil tissues. ICC: MDA-MB-231 cells. IP: U-937 lysate. Flow Cyt: MDA-MB-231 cells.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.20 Constituents: 0.35% Sodium citrate, 0.17% Sodium chloride, 0.03% EDTA, 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR4427
<b>Isotype</b>	IgG

## Applications

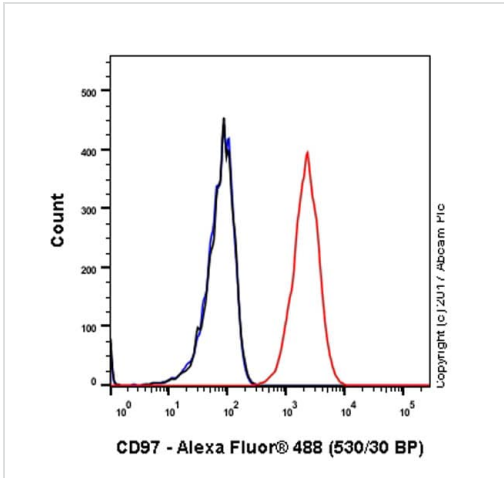
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab108368 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use at an assay dependent concentration.
WB		1/1000 - 1/10000. Predicted molecular weight: 92 kDa.
IP		1/10 - 1/100.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended.
ICC/IF		1/200.

## Target

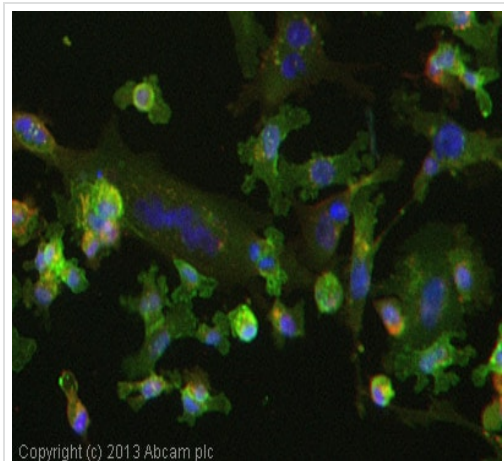
<b>Function</b>	Receptor potentially involved in both adhesion and signaling processes early after leukocyte activation. Plays an essential role in leukocyte migration.
<b>Tissue specificity</b>	Broadly expressed, found on most hematopoietic cells, including activated lymphocytes, monocytes, macrophages, dendritic cells, and granulocytes. Expressed also abundantly by smooth muscle cells. Expressed in thyroid, colorectal, gastric, esophageal and pancreatic carcinomas too. Expression are increased under inflammatory conditions in the CNS of multiple sclerosis and in synovial tissue of patients with rheumatoid arthritis. Increased expression of CD97 in the synovium is accompanied by detectable levels of soluble CD97 in the synovial fluid.
<b>Sequence similarities</b>	Belongs to the G-protein coupled receptor 2 family. LN-TM7 subfamily. Contains 5 EGF-like domains. Contains 1 GPS domain.
<b>Domain</b>	The first two EGF domains mediate the interaction with DAF. A third tandemly arranged EGF domain is necessary for the structural integrity of the binding region. Binding to chondroitin sulfate is mediated by the fourth EGF domain.
<b>Post-translational modifications</b>	Proteolytically cleaved into 2 subunits, an extracellular alpha subunit and a seven-transmembrane subunit.
<b>Cellular localization</b>	Cell membrane and Secreted > extracellular space.

## Images



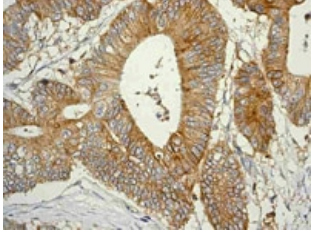
Flow Cytometry - Anti-CD97 antibody [EPR4427] (ab108368)

Flow Cytometry analysis of MDA-MB-231 (human mammary gland epithelial adenocarcinoma) cells labeling CD97 with purified ab108368 at 1/250 dilution (10ug/ml) (red). A Goat anti rabbit IgG (Alexa Fluor® 488)(1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Immunocytochemistry/ Immunofluorescence - Anti-CD97 antibody [EPR4427] (ab108368)

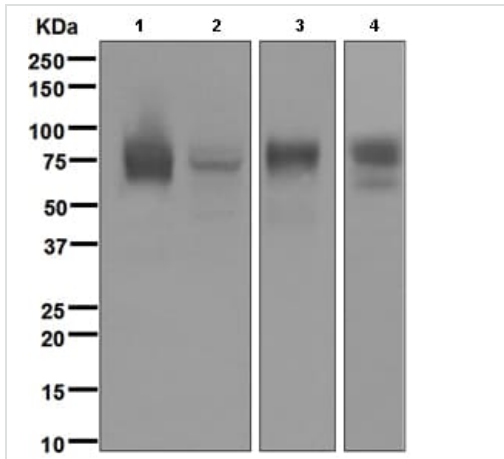
ICC/IF image of ab108368 stained MDA-MB-231 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab108368 at 1/200 dilution overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- rabbit (**ab96899**) IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD97 antibody [EPR4427] (ab108368)

ab108368 at 1/250 dilution staining CD97 in human colonic adenocarcinoma by Immunohistochemistry, Paraffin-embedded tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-CD97 antibody [EPR4427] (ab108368)

**All lanes :** Anti-CD97 antibody [EPR4427] (ab108368) at 1/1000 dilution

**Lane 1 :** Human tonsil tissue lysate

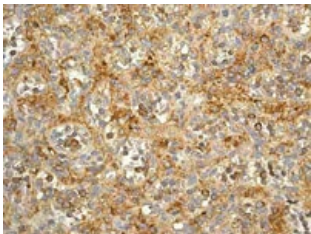
**Lane 2 :** Jurkat cell lysate

**Lane 3 :** U937 (Human histiocytic lymphoma cell line) cell lysate

**Lane 4 :** Human fetal thymus tissue lysate

Lysates/proteins at 10 µg per lane.

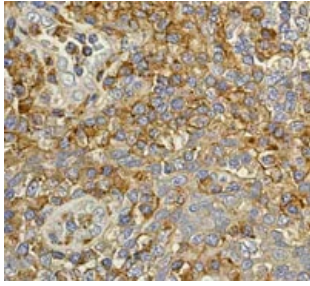
**Predicted band size:** 92 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD97 antibody [EPR4427] (ab108368)

ab108368 at 1/250 dilution staining CD97 in human spleen by Immunohistochemistry, Paraffin-embedded tissue.

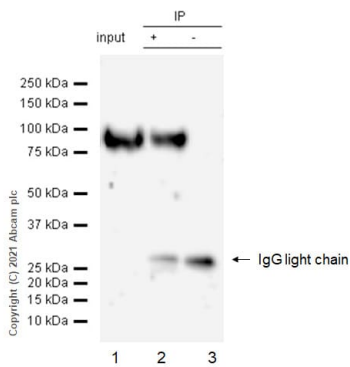
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD97 antibody [EPR4427] (ab108368)

ab108368 at 1/250 dilution staining CD97 in human colon adenocarcinoma tissue by Immunohistochemistry, Paraffin-embedded tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-CD97 antibody [EPR4427] (ab108368)

CD97 was immunoprecipitated from 0.35 mg U-937 (Human histiocytic lymphoma monocyte) whole cell lysate 10 µg with 108368 at 1/50 dilution (2µg). VeriBlot for IP Detection Reagent (HRP)(**ab131366**) was used at 1/5000 dilution.





Lane 1: U-937 (Human histiocytic lymphoma monocyte) whole cell lysate 10 µg

Lane 2: ab108368 IP in U-937 whole cell lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab108368 in U-937 whole cell lysate

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

### Why choose a recombinant antibody?

 <b>Research with confidence</b> Consistent and reproducible results	 <b>Long-term and scalable supply</b> Recombinant technology
 <b>Success from the first experiment</b> Confirmed specificity	 <b>Ethical standards compliant</b> Animal-free production

Anti-CD97 antibody [EPR4427] (ab108368)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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