abcam

Product datasheet

Anti-CD47 antibody [EPR23002-67] ab256495

Recombinant RabMAb

5 Images

Overview

Product name	Anti-CD47 antibody [EPR23002-67]
Description	Rabbit monoclonal [EPR23002-67] to CD47
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, Flow Cyt **Unsuitable for:** IHC-P,IP or WB
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	Flow Cyt: Human peripheral blood mononuclear cells and U-937 cells. ICC/IF: HEK293 and Jurkat cells.
General notes	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**.

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR23002-67

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab256495 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
ICC/IF		1/100.
Flow Cyt		1/500.

Application notes Is unsuitable for IHC-P,IP or WB.

Target

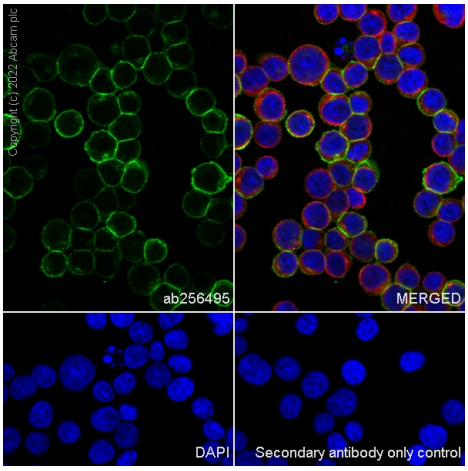
Function Has a role in both cell adhesion by acting as an adhesion receptor for THBS1 on platelets, and in the modulation of integrins. Plays an important role in memory formation and synaptic plasticity in the hippocampus (By similarity). Receptor for SIRPA, binding to which prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells. Interaction with SIRPG mediates cell-cell adhesion, enhances superantigen-dependent T-cell-mediated proliferation and costimulates T-cell activation. May play a role in membrane transport and/or integrin dependent signal transduction. May prevent premature elimination of red blood cells. May be involved in membrane permeability changes induced following virus infection.

Tissue specificity Very broadly distributed on normal adult tissues, as well as ovarian tumors, being especially abundant in some epithelia and the brain.

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

Cellular localization Cell membrane.

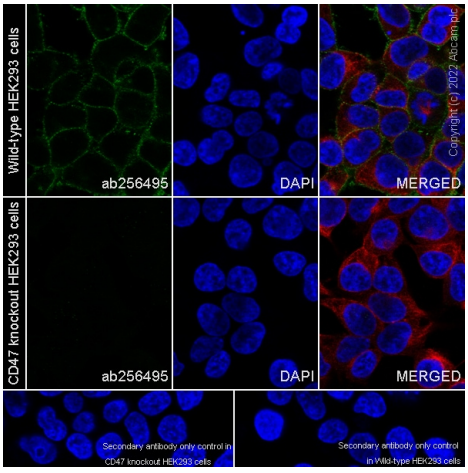
Images



Immunocytochemistry/ Immunofluorescence - Anti-CD47 antibody [EPR23002-67] (ab256495)

Immunocytochemistry analysis of Jurkat (human T cell leukemia T lymphocyte) cells labelling CD47 with ab256495 at 1:100 (5.62 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% TritonX-100. Cells were counterstained with Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 (2.5µg/ml) dilution. Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (**ab150081**) was used as the secondary antibody at 1:1000 (2 ug/ml) dilution. DAPI (blue) was used as nuclear counterstain. Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (**ab150081**) was used as the secondary antibody only control.

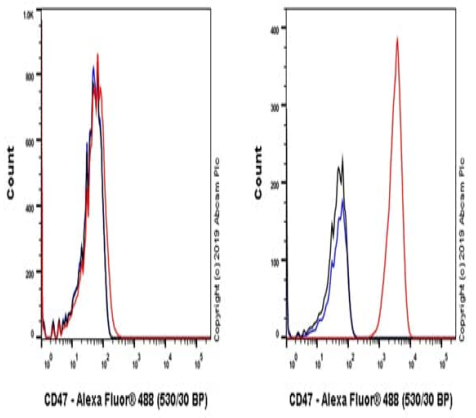
Confocal image showing membranous staining in Jurkat cell line.



Immunocytochemistry/ Immunofluorescence - Anti-CD47 antibody [EPR23002-67] (ab256495)

Immunocytochemistry analysis of CD47 KO HEK293T (**ab266324**) cells labelling CD47 with ab256495 at 1:100 (5.62 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% TritonX-100. Cells were counterstained with Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 (2.5µg/ml) dilution. Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (**ab150081**) was used as the secondary antibody at 1:1000 (2 ug/ml) dilution. DAPI (blue) was used as nuclear counterstain. Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (**ab150081**) was used as the secondary antibody only control.

Confocal image showing membranous staining in Parental HEK293 cell line, no staining in CD47 KO HEK293T cell line.

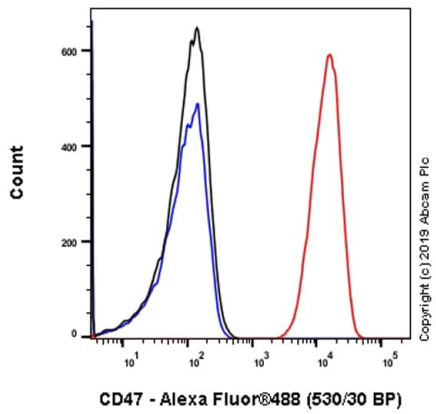


Flow Cytometry - Anti-CD47 antibody [EPR23002-67] (ab256495)

Flow cytometric analysis of HepG2 (Human hepatocellular carcinoma, Left) / U-937 (Human monocyte histiocytic lymphoma, Right) cells labelling CD47 with ab256495 at 1/500 compared with a Rabbit monoclonal IgG (**ab172730**) / Black isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150097**) at 1/5000 dilution was used as the secondary antibody.

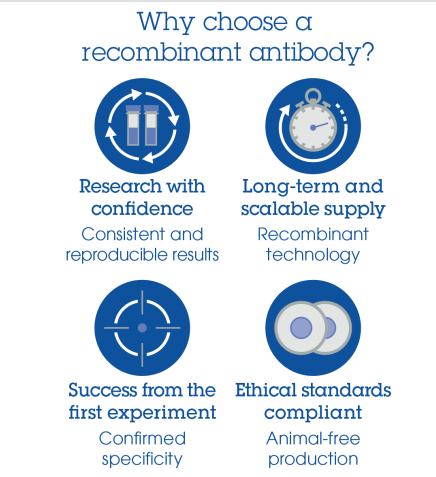
Low expression control: HepG2 (PMID: 25721088, 30415063).

Gated on viable cells.



Flow Cytometry - Anti-CD47 antibody [EPR23002-67] (ab256495)

Flow cytometric analysis of Human peripheral blood mononuclear cell (PBMC) cells labelling CD47 with ab256495 at 1/500 compared with a Rabbit monoclonal IgG (**ab172730**) / Black isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150097**) at 1/5000 dilution was used as the secondary antibody.



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