

## Product datasheet

### Anti-CD47 antibody [OX-101] ab33852

[2 References](#) [2 Images](#)

#### Overview

|                            |  |
|----------------------------|--|
| <b>Product name</b>        | Anti-CD47 antibody [OX-101]  |
| <b>Description</b>         | Mouse monoclonal [OX-101] to CD47  |
| <b>Host species</b>        | Mouse  |
| <b>Tested applications</b> | <b>Suitable for:</b> IHC-Fr, Flow Cyt  |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Rat  |
| <b>Immunogen</b>           | Tissue, cells or virus corresponding to Rat CD47. Biotinylated rat (AO) thymocytes.  |
| <b>Positive control</b>    | Flow Cyt: Lewis rat splenocytes. IHC-Fr: Rat Placenta  |
| <b>General notes</b>       | <p>OX-101 (this clone) recognizes the rat homologue of human CD47, which has been identified as the ligand for the rat signal regulatory protein (SIRP).</p> <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a>.</p> <p>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.</p> <p>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&amp;As</p> |

#### Properties

|                               |   |
|-------------------------------|---|
| <b>Form</b>                   | Liquid  |
| <b>Storage instructions</b>   | 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.                     |
| <b>Storage buffer</b>         | Preservative: 0.02% Sodium azide<br>Constituent: PBS  |
| <b>Purity</b>                 | Protein G purified  |
| <b>Purification notes</b>     | ab33852 was purified from tissue culture supernatant.   |
| <b>Primary antibody notes</b> | OX-101 (this clone) recognises the rat homologue of human CD47, which has been identified as the ligand for the rat signal regulatory protein (SIRP). |

|                         |            |
|-------------------------|------------|
| <b>Clonality</b>        | Monoclonal |
| <b>Clone number</b>     | OX-101     |
| <b>Isotype</b>          | IgG1       |
| <b>Light chain type</b> | kappa      |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab33852 in the following tested applications.

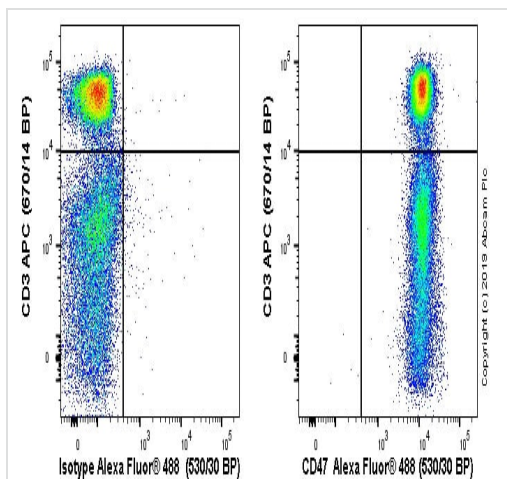
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes                             |
|-------------|-----------|-----------------------------------|
| IHC-Fr      |           | Use a concentration of 5 µg/ml.   |
| Flow Cyt    |           | Use a concentration of 0.2 µg/ml. |

## Target

|                              |  |
|------------------------------|--|
| <b>Function</b>              | 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. |
| <b>Tissue specificity</b>    | Very broadly distributed on normal adult tissues, as well as ovarian tumors, being especially abundant in some epithelia and the brain.  |
| <b>Sequence similarities</b> | Contains 1 Ig-like V-type (immunoglobulin-like) domain.  |
| <b>Cellular localization</b> | Cell membrane.   |

## Images

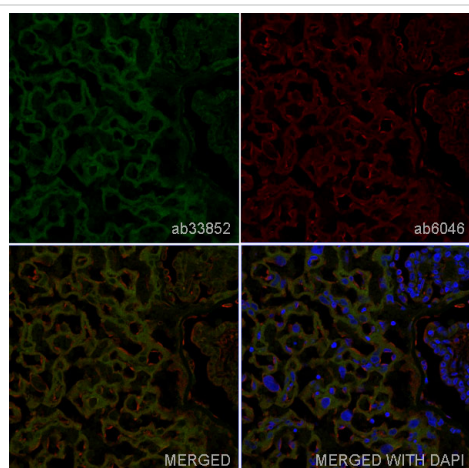


Flow Cytometry - Anti-CD47 antibody [OX-101]  
(ab33852)

Lewis rat splenocytes stained with ab33852 (right) or mouse IgG1k (left). Lewis rat splenocytes were incubated for 30 min on ice in 10% rat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab33852) or mouse IgG1k Isotype (**ab170190**) ( $1 \times 10^6$  in 100  $\mu$ l at 0.2  $\mu$ g/ml) for 30 min on ice.

The secondary antibody Goat Anti-Mouse IgG H&L (Alexa Fluor® 488, pre-adsorbed) (**ab150117**) was used at 1/2000 dilution for 30 min at 4°C. The cells were simultaneously stained with CD3 APC antibody.

Acquisition of >30,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter. Events were gated on viable lymphocytes.



Immunohistochemistry (Frozen sections) - Anti-CD47 antibody [OX-101] (ab33852)

IHC image of CD47 staining in a section of frozen normal Rat Placenta.

The section was fixed using 10% formaldehyde in 1XPBS for 10 minutes. No antigen retrieval step was performed prior to staining. Non-specific protein-protein interactions were then blocked in TBS containing 0.025% (v/v) Triton X-100, 0.3M glycine and 1% (w/v) BSA for 1h at room temperature. The section was then incubated overnight at +4°C in TBS containing 0.025% (v/v) Triton X-100 and 1% (w/v) BSA with ab33852 at 5  $\mu$ g/ml and **ab6046** (Rabbit polyclonal to beta Tubulin - Loading Control) at 1/1000. The section was then incubated with **ab150117** (Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) preabsorbed, (Shown in green) 1/1000) and **ab150080** (Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) (Shown in red) 1/1000) for 1 hour at room temperature. DAPI was used to stain the cell nuclei (blue). The section was then mounted using Fluoromount®.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

For IHC staining systems (automated and non-automated), customers should optimize variable parameters such as antibody concentrations and incubation times.

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