

# Alexa Fluor® 488 Anti-CD45RC antibody [MRC OX-22] ab256260

2 Images

### Overview

<b>Product name</b>	Alexa Fluor® 488 Anti-CD45RC antibody [MRC OX-22]
<b>Description</b>	Alexa Fluor® 488 Mouse monoclonal [MRC OX-22] to CD45RC
<b>Host species</b>	Mouse
<b>Conjugation</b>	Alexa Fluor® 488. Ex: 495nm, Em: 519nm
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt, IHC-Fr
<b>Species reactivity</b>	<b>Reacts with:</b> Rat, Human
<b>Immunogen</b>	Tissue, cells or virus corresponding to Rat CD45RC. PHA stimulated rat lymphocytes.
<b>Positive control</b>	Flow Cyt: Lewis rat splenocytes.IHC-Fr: Normal rat spleen tissue sections.
<b>General notes</b>	<p>Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or <a href="mailto:outlicensing@thermofisher.com">outlicensing@thermofisher.com</a>.</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.

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&As

## 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. Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.
<b>Storage buffer</b>	Preservative: 0.02% Sodium azide Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	MRC OX-22
<b>Myeloma</b>	NS1
<b>Isotype</b>	IgG1
<b>Light chain type</b>	kappa

## Applications

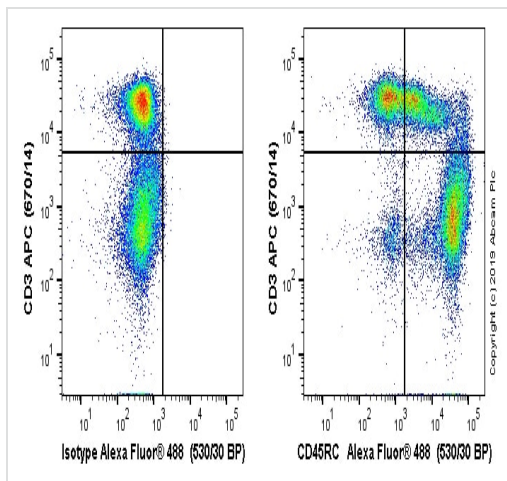
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab256260 in the following tested applications.  
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		1/2500.
IHC-Fr		1/50.

## Target

<b>Function</b>	Protein tyrosine-protein phosphatase required for T-cell activation through the antigen receptor. Acts as a positive regulator of T-cell coactivation upon binding to DPP4. The first PTPase domain has enzymatic activity, while the second one seems to affect the substrate specificity of the first one. Upon T-cell activation, recruits and dephosphorylates SKAP1 and FYN. Dephosphorylates LYN, and thereby modulates LYN activity.
<b>Involvement in disease</b>	Severe combined immunodeficiency autosomal recessive T-cell-negative/B-cell-positive/NK-cell-positive Multiple sclerosis
<b>Sequence similarities</b>	Belongs to the protein-tyrosine phosphatase family. Receptor class 1/6 subfamily. Contains 2 fibronectin type-III domains. Contains 2 tyrosine-protein phosphatase domains.
<b>Domain</b>	The first PTPase domain interacts with SKAP1.
<b>Post-translational modifications</b>	Heavily N- and O-glycosylated.
<b>Cellular localization</b>	Membrane. Membrane raft. Colocalized with DPP4 in membrane rafts.

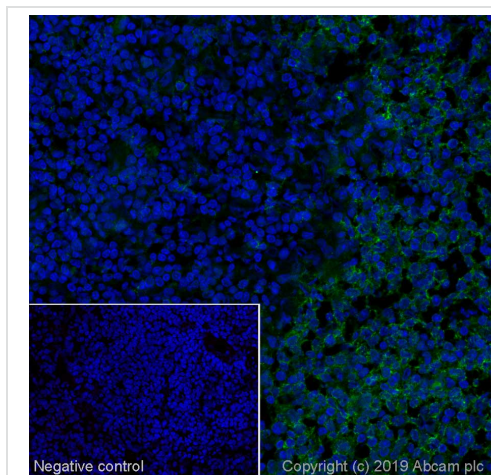
## Images



Flow Cytometry - Alexa Fluor® 488 Anti-CD45RC antibody [MRC OX-22] (ab256260)

Lewis rat splenocytes stained with ab256260 (right) or mouse IgG1κ Alexa Fluor® 488 isotype (left). Lewis rat splenocytes were incubated for 30 min on ice in 1x PBS / 10 % rat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab256260) or mouse IgG1κ Alexa Fluor® 488 isotype ( $1 \times 10^6$  in 100  $\mu$ l at 0.2  $\mu$ g/ml (1/2500)) for 30 min on ice. The cells were simultaneously stained with CD3.

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) - Alexa Fluor® 488 Anti-CD45RC antibody [MRC OX-22] (ab256260)

IHC image of CD45RC staining in a section of frozen normal rat spleen.

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 (w/v) 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 ab256260 at 1/50 dilution (shown in green). Nuclear DNA was labeled with DAPI (shown in blue). The section was then mounted using Fluoromount®.

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

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

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

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