

## Datasheet: MCA1642A647

<b>Description:</b>	RAT ANTI HUMAN CD52:Alexa Fluor® 647
<b>Specificity:</b>	CD52
<b>Other names:</b>	CAMPATH-1
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	YTH34.5
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	100 TESTS/1ml

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	■			Neat - 1/5

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

**Target Species** Human

**Species Cross Reactivity** Reacts with: Rhesus Monkey  
**N.B.** Antibody reactivity and working conditions may vary between species.

**Product Form** Purified IgG conjugated to Alexa Fluor® 647 - liquid

**Preparation** Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

**Buffer Solution** Phosphate buffered saline

**Preservative Stabilisers** 0.09% Sodium Azide  
1% Bovine Serum Albumin

**Approx. Protein Concentrations** IgG concentration 0.05 mg/ml

### External Database Links

**UniProt:**  
[P31358](#) CD52\_HUMAN [Related reagents](#)

**Entrez Gene:**  
[1043](#) CD52 [Related reagents](#)

**Synonyms** CDW52, HE5

**Specificity** MCA1642A647 reacts with the human CD52 antigen, also known as CAMPATH-1. The CD52 antigen is a remarkably small peptide that is heavily glycosylated, and attached to the cell surface membrane via a GPI link. The apparent molecular mass of the antigen on SDS-PAGE is 25-29kD.

CD52 is expressed at high density by lymphocytes, monocytes, eosinophils, thymocytes and macrophages. It is expressed by most lymphoid derived malignancies, although expression on myeloma cells is variable.

Humanised versions of CAMPATH-1 specific antibodies are currently in clinical trials for the treatment of a range of lymphoid malignancies.

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**Flow Cytometry** use 10ul of the suggested working dilution to label  $1 \times 10^6$  cells in 100ul. Method sheets are available on request.

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**References**

1. Hale, G. *et al.* (1998) Improving the Outcome of Bone Marow Transplantation by using CD52 Monoclonal Antibodies to prevent graft-versus-host disease and graft rejection. [Blood 92: 4581-4590.](#)
2. Salisbury, J.R. *et al.* (1994) Immunohistochemical analysis of CDw52 antigen expression in non-hodgkins lymphomas. [J. Clin. Path. 47: 313-317.](#)
3. Rodig, S. *et al.* (2006) Heterogeneous CD52 expression among hematologic neoplasms: implications for the use of alemtuzumab (CAMPATH-1H). [Clin. Cancer Res. 12: 7174-7179.](#)
4. Haniffa, M. *et al.* (2009) Differential rates of replacement of human dermal dendritic cells and macrophages during hematopoietic stem cell transplantation. [J Exp Med. 206: 371-85.](#)
5. Ratzinger, G. *et al.* (2003) Differential CD52 expression by distinct myeloid dendritic cell subsets: implications for alemtuzumab activity at the level of antigen presentation in allogeneic graft-host interactions in transplantation. [Blood. 101: 1422-9.](#)
6. Hu, Y. *et al.* (2009) Investigation of the mechanism of action of alemtuzumab in a human CD52 transgenic mouse model. [Immunology. 128: 260-70.](#)
7. Golay, J. *et al.* (2006) The sensitivity of acute lymphoblastic leukemia cells carrying the t(12;21) translocation to campath-1H-mediated cell lysis. [Haematologica. 91: 322-30.](#)

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**Storage** Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Shelf Life** 18 months from date of despatch.

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**Acknowledgements** The Alexa Fluor® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays, and are covered by pending and issued patents.

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**Health And Safety Information** Material Safety Datasheet Documentation #10041 available at: <http://www.abdserotec.com/uploads/MSDS/10041.pdf>

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## Related Products

### Recommended Negative Controls

[RAT IgG2b NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA1125A647\)](#)

## Other formats and applications

This reagent is also available in a [FITC](#), [Low Endotoxin](#), [Purified](#), [RPE](#) format and is useful for Immunohistology - Frozen, Immunohistology - Paraffin, Immunohistology - Resin, ELISA, Immunoprecipitation, Western Blotting, Cytotoxic Assays

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**For research purposes only, unless otherwise specified in writing by AbD Serotec.**



**AbD Serotec offices contact details click [here](#)**

**Address:**

MorphoSys UK Ltd, Endeavour House, Langford  
Business Park, Langford Lane, Kidlington,  
Oxford, OX5 1GE, UK

**Tel:** +44 (0)1865 852700

**Email:** [tech.uk@abdserotec.com](mailto:tech.uk@abdserotec.com)

**Web:** [www.abdserotec.com](http://www.abdserotec.com)

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