

RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Rat Anti-Human CD52, FITC-labeled

Catalog No.	Target Species		
DS-MB-03657	Human	IgG2b	

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant **Synonyms:** CDW52, HE5

Formulation

Product Form: Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid Purified

Product Type: Monoclonal Antibody **Buffer Solution:** Phosphate buffered saline

Preservative Stabilizers: 0.09% Sodium Azide (NaN₃), 1% Bovine Serum Albumin

Approx. Protein Concentrations: IgG concentration 0.1 mg/ml

Specificity

This product 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.

Species Cross Reactivity: Reacts with Rhesus Monkey

N.B. Antibody reactivity and working conditions may vary between species.

Applications

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Flow Cytometry (1)	•			Neat
Western Blotting			•	

Note: Other applications have not been tested. Optimal dilutions should be determined. (1) Use 10ul of the suggested working dilution to label 1 \times 10⁶ cells in 100ul.

The products are furnished for LABORATORY RESEARCH USE ONLY.

Not for diagnostic or therapeutic use.



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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.

Shelf Life: 18 months from date of dispatch.

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.