



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Mouse Anti-Rat MHC Class I RT1A, FITC-labeled

Catalog No.
DS-MB-02242

Target Species
Rat

Isotype
IgG1

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Immunogen: Rat spleen glycoproteins

Fusion Partners: Spleen cells from immunised BALB/c mice were fused with cells of the mouse P3X63Ag8.653 myeloma cell line.

Formulation

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

Product Type: Monoclonal Antibody

Buffer Solution: Phosphate buffered saline

Preservative Stabilisers: 0.09% Sodium Azide, 1% Bovine Serum Albumin

Approx. Protein Concentrations: IgG concentration 0.1 mg/ml

Specificity

This product recognises a monomorphic determinant of rat MHC Class I (RT1A), expressed by all rat strains. However, quantitative measurements suggest that not all of the class I molecules are recognised.

This product has been used in immunoaffinity purification of rat MHC class I molecules (1).

This product is routinely tested in flow cytometry on rat splenocytes.

Applications

Options	YES	NO	Not determined	Recommended Work dilution or concentration
Flow Cytometry (1)	•			Neat - 1/10
Immunohistology - Frozen			•	
Immunohistology - Paraffin (2)		•		
Elisa			•	

Note: Other applications are not tested yet. Optimal dilutions should be determined.

(1) Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

(2) Acetone fixation recommended - the antigen is sensitive to fixation with paraformaldehyde.

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. Fukumoto, T. *et al.* (1982) Mouse monoclonal antibodies against rat major histocompatibility antigens. Two Ia antigens and expression of Ia and Class I antigens in rat thymus. *Eur. J. Immunol.* 12: 237-243.
2. Bukovský, A. *et al.* (1984) Association of some cell surface antigens of lymphoid cells and cell surface differentiation antigens with early rat pregnancy. *Immunology.* 52:631-640
3. Osawa, H. *et al.* (1985) Inhibition of IL 2-dependent proliferation of rat T lymphoblasts by the monoclonal antibody ART62 which reacts with MHC class I antigens *J. Immunol.* 134(6): 3901-3906.
4. Stet, R.J.M. *et al.* (1987) U9F4: A monoclonal antibody recognizing a rat polymorphic class I determinant. *Transpl. Proc.* 19: 3004-3005.
5. Fujikawa, L. S. *et al.* (1989) Class II antigens on retinal vascular endothelium, pericytes, macrophages, and lymphocytes of the rat *Invest. Ophthalmol. Vis. Sci.* 30(1): 66-73
6. Zhai, Y. and Knechtle, S. *et al.* (1998) Two distinct forms of soluble MHC class I molecules synthesized by different mechanisms in normal rat cells in vitro *Human Immunol.* 59: 404-414
7. Baca Jones, C.C. *et al.* (2009) Rat cytomegalovirus infection depletes MHC II in bone marrow derived dendritic cells. *Virology.* 388: 78-90.

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