

RayBiotech, Inc.

3607 Parkway Lane suite 200 Norcross,GA 30092

Tel: 770-729-2992, 1-888-494-8555

Fax: 770-206-2393

Website: www.raybiotech.com Email: info@raybiotech.com

Certificate of Analysis and Data Sheet

Mouse Anti-Human HLA ABC: FITC

Catalog No.Target SpeciesIsotypeDS-MB-01541HumanIgG2a

Preparation

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

supernatant.

Immunogen: Purified human tonsil lymphocyte membranes.

Fusion Partners: Spleen cells from immunized BALB/c mice were fused with cells of the mouse

NS1/1-Ag4.1 myeloma cell line.

Specificity

The major histocompatibility complex (MHC) is a cluster of genes that are important in the immune response to infections. In humans, this complex is referred to as the human leukocyte antigen (HLA) region. There are 3 major MHC class I proteins encoded by the HLA which are HLA A, HLA B and HLA C. These proteins are found on the surface of almost all nucleated somatic cells.

DS-MB-01541 recognizes an antigenic determinant shared among products of the HLA A, B and C DS-MB-01541 recognizes a conformational epitope, reacting with HLA class I alpha3 and alpha2 domains.

Reacts with: Macaque, Bovine, Cat, Cynomolgus monkey, Baboon, Rhesus Monkey, Chimpanzee, Gorilla, Shrew

Does not react with: Goat, Dog, Guinea Pig, Rabbit, Mouse, Chicken, Amphibia

* Antibody reactivity and working conditions may vary between species.

Formulation

Product Type: Monoclonal Antibody

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

Buffer Solution: Phosphate buffered saline pH7.4

Preservative Stabilizers: 0.01% Sodium Azide, 1% Bovine Serum Albumin

Approx. Protein Concentrations: IgG concentration 0.1 mg/ml

Storage

Store at $+4^{\circ}$ C or at -20° C if preferred.

This product should be stored undiluted. Storage in frost-free freezers is not recommended. 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.



RayBiotech, Inc.

3607 Parkway Lane suite 200 Norcross,GA 30092

Tel: 770-729-2992, 1-888-494-8555

Fax: 770-206-2393

Website: www.raybiotech.com Email: info@raybiotech.com

Applications

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Flow Cytometry	•			
Western Blotting			•	
Elisa			•	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application. Histology Positive Control Tissue: Tonsil

Reference

- 1. Barnstable, C. J. *et al.* (1978) Production of monoclonal antibodies to group A erythrocytes, HLA and other human cell surface antigens new tools for genetic analysis. Cell. 14: 9–20.
- 2. Jacobsen, C. N. *et al.* (1993) Reactivities of 20 anti-human monoclonal antibodies with leucocytes from ten different animal species. Vet. Immunol. Immunopathol. 39: 461-466.
- 3. Yoshino, N. *et al.* (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of Cynomolgus monkeys (*Macaca fascicularis*) by using anti-human cross-reactive antibodies. Exp. Anim. 49: 97-110.
- 4. Neefjes, J. J. *et al.* (1986) A biochemical characterization of feline MHC products: unusually high expression of class II antigens on peripheral blood lymphocytes. Immunogenetics 23: 341-347.
- 5. Stern, P. *et al.* (1987) Class I-like MHC molecules expressed by baboon placental syncytiotrophoblast. J. Immunol. 138: 1088-1091.
- 6. Verbeek, M. M. *et al.* (1995) T lymphocyte adhesion to human brain pericytes is mediated via very late antigen-4/vascular cell adhesion molecule-1 interactions. J. Immunol. 154: 5876-5884.
- 7. Tanabe, M. *et al.* (1992) Structural and functional analysis of monomorphic determinants recognized by monoclonal antibodies reacting with the HLA class I alpha 3 domain. J. Immunol. 148: 3203-3209.
- 8. Ishitani, A. *et al.* (2003) Protein expression and peptide binding suggest unique and interacting functional roles for HLA-E, F and G in maternal-placental immune recognition. J Immunol. 171: 1376-1384.
- 9. Dressel, R. *et al.* (2003) Differential effect of acute and permanent heat shock protein 70 overexpression in tumor cells on lysability by cytotoxic T lymphocytes. Cancer Res. 63: 8212-8220.
- 10. Brodsky, F. M. and Parham, P. (1982) Evolution of HLA antigenic determinants: species cross-reactions of monoclonal antibodies. Immunogenetics 15: 151-166