# **CD43**

Concentrated and Prediluted Monoclonal Antibody 902-005-121417



Catalog Number:ACR 005 A, CAPR 005 AADescription:0.1, 1.0 ml, concentrated6.0 ml, predilutedDilution:1:100Ready-to-use

**Diluent:** Monet Blue N/A

## **Intended Use:**

For Research Use Only. Not for use in diagnostic procedures.

#### **Summary and Explanation:**

Studies have shown CD43 recognizes a 95/115/135 kDa (depending upon the extent of glycosylation) cell surface glycoprotein, identified as CD43 (leukosialin, sialophorin, or leukocyte sialoglycoprotein) (4th Leucocyte Workshop). CD43 is expressed on all thymocytes and T-cells (1-6). This antibody has been shown to aid in the identification and classification of T-cell malignancies and low grade B-cell lymphomas.

# **Principle of Procedure:**

Antigen detection in tissues and cells is a multi-step immunohistochemical process. The initial step binds the primary antibody to its specific epitope. After labeling the antigen with a primary antibody, a secondary antibody is added to bind to the primary antibody. An enzyme label is then added to bind to the secondary antibody; this detection of the bound antibody is evidenced by a colorimetric reaction.

Source: Mouse monoclonal

Species Reactivity: Human; others not tested

Clone: DF-T1 Isotype: IgG1

Total Protein Concentration: ~10 mg/ml. Call for lot specific Ig

concentration.

Epitope/Antigen: CD43

**Cellular Localization:** Cell surface

Positive Tissue Control: Tonsil or T-cell lymphoma

**Known Applications:** 

Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

Supplied As: Buffer with protein carrier and preservative

# Storage and Stability:

Store at 2°C to 8°C. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

## **Staining Protocol Recommendations:**

**Peroxide Block:** Block for 5 minutes with Biocare's Peroxidazed 1. **Pretreatment:** Perform heat retrieval using Biocare's Diva or Reveal Decloaker. Refer to the Diva or Reveal Decloaker product data sheet for specific instructions.

**Protein Block (Optional):** Incubate for 5-10 minutes at RT with Biocare's Background Punisher.

Primary Antibody: Incubate for 30 minutes at RT.

**Probe:** Incubate for 10 minutes at RT with a secondary probe. **Polymer:** Incubate for 10-20 minutes at RT with a tertiary polymer. **Chromogen:** Incubate for 5 minutes at RT with Biocare's DAB - OR - Incubate for 5-7 minutes at RT with Biocare's Warp Red.

#### Counterstain:

Counterstain with hematoxylin. Rinse with deionized water. Apply Tacha's Bluing Solution for 1 minute. Rinse with deionized water.

## **Technical Note:**

This antibody has been standardized with Biocare's MACH 4 detection system. Use TBS buffer for washing steps.

## **Limitations:**

This product is provided for Research Use Only (RUO) and is not for use in diagnostic procedures. Suitability for specific applications may

# **Limitations Cont'd:**

vary and it is the responsibility of the end user to determine the appropriate application for its use.

#### **Precautions:**

- 1. This antibody contains less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials according to U.S. 29 CFR 1910.1200, OSHA Hazard communication and EC Directive 91/155/EC. Sodium azide (NaN $_3$ ) used as a preservative is toxic if ingested. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. (Center for Disease Control, 1976, National Institute of Occupational Safety and Health, 1976) (7)
- 2. Specimens, before and after fixation, and all materials exposed to them should be handled as if capable of transmitting infection and disposed of with proper precautions. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come into contact with sensitive areas, wash with copious amounts of water. (8)
- 3. Microbial contamination of reagents may result in an increase in nonspecific staining.
- 4. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change.
- 5. Do not use reagent after the expiration date printed on the vial.
- 6. The SDS is available upon request and is located at http://biocare.net.

# **Technical Support:**

Contact Biocare's Technical Support at 1-800-542-2002 for questions regarding this product.

## References:

- 1. Muretto P. An immunohistochemical study on fetuses and newborns lymph nodes with emphasis on follicular dendritic cells. Eur J of Histochem. 1995; 39(4):301-8.
- 2. de Smet W, Walter H, van Hove L. A new CD43 monoclonal antibody induces homotypic aggregation of human leucocytes through a CD11a/CD18-dependent and -independent mechanism. Immunology. 1993; 79(1):46-54.
- 3. Bo L, Mork S, Nyland H. An immunohistochemical study of mononuclear cells in meningiomas. Neuropathol Appl Neurobiol. 1992; 18(6):548-58.
- 4. Petruch UR, Horny HP, Kaiserling E. Frequent expression of haemopoietic and non-haemopoietic antigens by neoplastic plasma cells: an immunohistochemical study using formalin-fixed, paraffinembedded tissue. Histopathology. 1992; 20(1):35-40.
- 5. Anderson C, *et al.* Methods in pathology. Identification of T-cell lymphomas in paraffin-embedded tissues using polyclonal anti-CD3 antibody: comparison with frozen section immunophenotyping and genotypic analysis. Mod Pathol. 1991; 4(3):358-62.
- 6. Stross WP, *et al.* Molecule detected in formalin fixed tissue by antibodies MT1, DF-T1, and L60 (Leu-22) corresponds to CD43 antigen. J Clin Pathol. 1989; 42(9):953-61.
- 7. Center for Disease Control Manual. Guide: Safety Management, NO. CDC-22, Atlanta, GA. April 30, 1976 "Decontamination of Laboratory Sink Drains to Remove Azide Salts."
- 8. Clinical and Laboratory Standards Institute (CLSI). Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline-Fourth Edition CLSI document M29-A4 Wayne, PA 2014.

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