# CD30 Cocktail

Prediluted Cocktail Antibody Control Number: 902-074-090917

## Catalog Number: APR 074 AA

Description:	6.0 ml, prediluted
Dilution:	Ready-to-use
Diluent:	N/A

### Intended Use:

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

### Summary and Explanation:

The CD30 antigen is expressed in mononuclear Hodgkin's and multinucleated Reed-Sternberg cells. It is expressed by tumor cells of a majority of anaplastic large cell lymphomas, and by a varying proportion of activated T and B cells. CD30 is also expressed on embryonal carcinomas. It distinguishes large cell lymphomas derived from activated lymphoid cells, from histiocytic malignancies, lymphomas derived from resting and precursor lymphoid cells, or from anaplastic carcinomas. CD30 and CD15 primary antibodies may be used in tangent to differentiate between anaplastic large cell lymphoma and Hodgkin's disease (Reed-Sternberg cells). The CD30 cocktail has been shown to be more effective than other single clone CD30 antibodies such as BerH2 (Ki-1).

### **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: BerH2 + Con6D/B5

Isotype: IgG1 + kappa

Epitope/Antigen: CD30

Cellular Localization: Cell membrane

Positive Control: Hodgkin's or anaplastic large cell lymphoma

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

### **Staining Protocol Recommendations:**

Peroxide Block: Block for 5 minutes with Biocare's Peroxidazed 1.

Pretreatment Solution (recommended): Diva

# **Pretreatment Protocol:**

Heat Retrieval Method:

Retrieve sections under pressure using Biocare's Decloaking Chamber, followed by a wash in distilled water; alternatively, steam tissue sections for 45-60 minutes. Allow solution to cool for 10 minutes then wash in distilled water.

**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 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 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<sub>3</sub>) 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 in 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. Tilly H, *et al.* Primary anaplastic large-cell lymphoma in adults: clinical presentation, immunophenotype, and outcome. Blood. 1997 Nov 1; 90 (9):3727-34.

2. Filippa DA, *et al.* CD30 (Ki-1) positive malignant lymphomas: clinical, immunophenotypic, histologic, and genetic characteristics and differences with Hodgkin's disease. Blood. 1996 Apr 1:87(7):2905-17.

3. Clavio M, *et al.* Anaplastic large cell lymphoma: a clinicopathologic study of 53 patients. Leuk Lymphoma. 1996 Jul;22(3-4):319-27.

4. Stein H, *et al.* Identification of Hodgkin and Sternberg-Reed cells as a unique cell type derived from a newly-detected small-cell population. Int J Cancer. 1982;30:445 -59.

5. Stein H, *et al.* The expression of the Hodgkin's disease associated antigen Ki-1 in reactive and neoplastic lymphoid tissue: evidence that Reed-Sternberg cells and histiocytic malignancies are derived from activated lymphoid cells. Blood. 1985;66:848 -58.

6. Pallesen G, Hamilton-Dutoit SJ. Ki-1 (CD30) antigen is regularly expressed by tumor cells of embryonal carcinoma. Am J Pathol. 1988;133:446-50.

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.