

## CD43 clone MT1

### Instructions for Use

#### Specification:

CD43 antigen is expressed on all T cells, NK cells, myeloid cells and monocytes as well as on CD5 positive mature B cells. It is also present on all immature hematopoietic cells in the bone marrow [1]. The antigen is deficient in patients with Wiskott-Aldrich syndrome. A soluble form of CD43 is present in human serum [2]. CD43, clone MT1 antibodies are used to identify B cell lines and myeloma cells. It may be used in the diagnosis of chronic lymphocytic leukemias (CLL), as an alternative to CD5. The antigen detected by MT1 is the only marker expressed on neoplasms of the very early precursor cells. In immunohistochemistry it reacts with T cells, macrophages, myeloid cells and B cells (weak). It is used for the typing of lymphomas in paraffin sections [3-5]. CD43 may function as an adhesion molecule via interaction with CD54 although this has not been definitely established. It may also inhibit leucocyte interactions with other cells [6]. The antigen is involved in the activation of T-cells, B cells, NK cells and monocytes [5]. The membrane proximal portion of the cytoplasmic domain mediates an association with the cytoskeleton [1].

#### Availability:

Catalog No.	Contents	Volume
ILM4508-C01	CD43	0.1 ml concentrate
ILM4508-C05	CD43	0,5 ml concentrate
ILM4508-C1	CD43	1.0 ml concentrate

**Intended use:** For Research Use Only

**Reactivity:** Human

**Clone:** MT1

**Species of origin:** Mouse

**Isotype:** IgG1

**Control Tissue:** Human mantle cell lymphoma tissue

**Staining:** Membranous

**Presentation:** Antibodies are supplied in 0.01M sodium phosphate, 0.15 M NaCl, pH 7.3, 0.2% BSA, 0.09% sodium azide

#### Application and suggested dilutions:

Pretreatment:

Pretreatment: Heat induced epitope retrieval in 10 mM citrate buffer, pH6.0, for 20 minutes is required for IHC staining on formalin-fixed, paraffin embedded tissue sections. Trypsin digestion of paraffin sections may enhance staining in some cases.

- Immunohistochemical staining of cryostat tissue sections (dilution up to 1:500-1:1000)
- Immunohistochemical staining of formalin-fixed, paraffin embedded tissue section (dilution 1:500 to 1:2000).
- Western blot (dilution 1:100 – 1:1000)

The optimal dilution for a specific application should be determined by the investigator.

**Note:** Dilution of the antibody in 10% normal goat serum followed by a goat anti-mouse secondary antibody-based detection is recommended.

**Storage & Stability:** Store at 2-8 °C. Do not use after expiration date printed on the vial.

**References:**

- 1) Barclay, A.N., et al. eds. 1997. The Leucocyte Antigen FactsBook. Academic Press. London
- 2) Schmid, K., et al. 1992. Proc.Natl. Acad.Sci. USA.89. 663-337
- 3) Poppema, S., et al. 1987. Am.J.Pathol. 127.418-429
- 4) Poppema, S., and Visser, L., 1987. Biotest Bulletin. 3. 131-139
- 5) Knapp. W., et al. eds. 1989. Leucocyte Typing Workshop IV. Oxford University Press
- 6) Manjunath, N., et al. 1995. Nature. 377. 535-538