

Monoclonal Antibody to CD19 - APC

Alternate names: B-cell marker, B-lymphocyte surface antigen B4, Differentiation antigen CD19, Leu-12

Catalog No.: SM1529APC
Quantity: 100 Tests

Background: CD19 is a member of the immunoglobulin superfamily and has two Ig like domains. The

CD19 molecule is expressed on 100% of the peripheral B cells as defined by expression of kappa or lamda light chains. It is expressed on approximately 10% of normal human peripheral blood cells and approximately 60% of splenic lymphocytes. It is not expressed on granulocytes, monocytes or T cells as defined by CD3 expression. CD19 defines a pan B antigen which is expressed from the earliest stages of B progenitor development, but is lost on terminal differentiation to plasma cells. It may also be present on some early myeloid progenitors, particularly those of the monoblastic type. The CD19 antigen is expressed on approximately 12% of peripheral blood lymphocytes. It appears to be expressed on myeloid leukemia cells, particularly those of monocytic lineage. Leukemia phenotype studies have demonstrated that the earliest and broadest B cell restricted

antigen is the CD19 antigen.

Uniprot ID: P15391

NCBI: NP 001171569.1

GenelD: 930

Host / Isotype: Mouse / IgG1

Clone: LT19

Format: State: Lyophilized purified IgG fraction.

Buffer System: PBS, pH 7.4, containing 1% BSA as stabilizer and 0.09% Sodium Azide as

preservative.

Label: APC – Allophycocyanin

Reconstitution: Restore with 1 ml distilled water.

Applications: Flow Cytometry: Use 10 μl of neat antibody to label 10e6 cells or cells or 100 μl whole

blood.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.



SM1529APC: Monoclonal Antibody to CD19 - APC

Specificity:

This antibody recognizes the CD19 cell surface antigen. It labels all B lymphocytes in peripheral blood and spleen but is negative on granulocytes, monocytes, platelets, T lymphocytes and erythrocytes.

This antibody is useful for enumerating normal B lymphocytes and typing B cell

malignancies by Flow cytometry and Immunofluorescence.

The antibody reacts with most B cell malignancies including chronic leukaemia and most lymphomas, but not multiple myeloma.

Species: Human.

Other species not tested.

Storage:

Prior to and following reconstitution store the antibody undiluted at 2-8°C.

DO NOT FREEZE!

Shelf life: one year from despatch.

General References: 1. Hughes, G.J. et al. (2007) Virus immunocapture provides evidence of CD8 lymphocyte-derived HIV-1 in vivo. AIDS. 21: 1507-13.

- 2. Allen, J.S. et al. (2009) Plasmacytoid dendritic cells are proportionally expanded at diagnosis of type 1 diabetes and enhance islet autoantigen presentation to T-cells through immune complex capture. Diabetes. 58: 138-45.
- 3. McIntosh, K. et al. (2006) The immunogenicity of human adipose-derived cells: temporal changes in vitro. Stem Cells. 24: 1246-53.
- 4. Sengstake, S. et al. (2006) CD21 and CD62L shedding are both inducible via P2X7Rs. Int Immunol. 2006 Jul;18(7):1171-8.
- 5. Villarroel Dorrego, M. et al. (2006) Transfection of CD40 in a human oral squamous cell carcinoma keratinocyte line upregulates immune potency and costimulatory molecules. Br J Dermatol. 154: 231-8.