Anti-CD19 [BU12] mAb

Catalogue number: 151429
Sub-type: Primary antibody
Images:

Contributor

Inventor: Roy Jefferis
Institute: University of Birmingham
Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-CD19 [BU12] mAb

Alternate name: CD19 Molecule; B-Lymphocyte Surface Antigen B4; T-Cell Surface Antigen Leu-12; Differentiation Antigen CD19; CD19 Antigen; CVID3; B4

Class: Monoclonal
Conjugate: Unconjugated
Description: CD19 is a member of the immunoglobulin superfamily and has two Ig like domains. It is a single chain glycoprotein, present on the surface of normal and neoplastic B-cells. CD19 is expressed at an early stage by projenitor B-cells in bone marrow and during all stages of B-cell maturation. This antigen is lost upon terminal differentiation to plasma cells. CD19 is important for detecting both normal and neoplastic B-cells. CD19 is present on neoplasms arising from early B-cells (e.g. acute leukaemia of pre-B-cells) and more differentiated B-cell neoplasms (e.g. chronic Lymphocytic leukaemia and non-Hodgkin's lymphoma). Leukaemia phenotype studies have demonstrated that the earliest and broadest B cell restricted antigen is the CD19 antigen. The CD19 cytoplasmic domain binds tyrosine kinases and PI-3 kinase.
Purpose:
Parental cell:
Organism:
Tissue:
Model:
Gender:
Isotype: IgG1
Reactivity: Human
Selectivity:
Host: Mouse
Immunogen: Human EB-4 Burkitt's lymphoma cell line
Immunogen UNIPROT ID:

Sequence:
Growth properties:
Production details:
Formulation:
Recommended controls:
Bacterial resistance:
Selectable markers:
Additional notes:

Target details

Target: CD19

Target alternate names:

Target background: CD19 is a member of the immunoglobulin superfamily and has two Ig like domains. It is a single chain glycoprotein, present on the surface of normal and neoplastic B-cells. CD19 is expressed at an early stage by projenitor B-cells in bone marrow and during all stages of B-cell maturation. This antigen is lost upon terminal differentiation to plasma cells. CD19 is important for detecting both normal and neoplastic B-cells. CD19 is present on neoplasms arising from early B-cells (e.g. acute leukaemia of pre-B-cells) and more differentiated B-cell neoplasms (e.g. chronic Lymphocytic leukaemia and non-Hodgkin's lymphoma). Leukaemia phenotype studies have demonstrated that the earliest and broadest B cell restricted antigen is the CD19 antigen. The CD19 cytoplasmic domain binds tyrosine kinases and PI-3 kinase.

Molecular weight:

Ic50:

Applications

Application: FACS ; IHC ; IP
Application notes:

Handling

Format: Liquid
Concentration: 0.9-1.1 mg/ml
Passage number:
Growth medium:
Temperature:
Atmosphere:
Volume:
Storage medium:
Storage buffer:

PBS with 0.02% azide
Storage conditions: -15° C to -25° C
Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: Santos et al. 2019. Immunology. 157(4):296-303. PMID: 31162836. ; Jeffery et al. 2015. PLoS One. 10(7):e0131539. PMID: 26134669. ; Vitamin D Antagonises the Suppressive Effect of Inflammatory Cytokines on CTLA-4 Expression and Regulatory Function. ; Means et al. 2007. J Virol. 81(12):6573-83. PMID: 17409151. ; The Kaposi's sarcoma-associated herpesvirus K5 E3 ubiquitin ligase modulates targets by multiple molecular mechanisms. ; Gigure et al. 2004. J Virol. 78(12):6222-32. PMID: 15163715. ; Insertion of host-derived costimulatory molecules CD80 (B7.1) and CD86 (B7.2) into human immunodeficiency virus type 1 affects the virus life cycle. ; O'Sullivan et al. 2002. J Immunol. 168(11):5491-8. PMID: 12023343. ; CD40 ligation conditions dendritic cell antigen-presenting function through sustained activation of NF-kappaB. ; Latour et al. 2001. J Immunol. 167(5):2547-54. PMID: 11509594. ; Bidirectional negative regulation of human T and dendritic cells by CD47 and its cognate receptor signal-regulator protein-alpha: down-regulation of IL-12 responsiveness and inhibition of dendritic cell activation. ; Mauri et al. 1995. J Immunol. 155(1):118-27. PMID: 7541409. ; Antigen-presenting T cells induce the development of cytotoxic CD4+ T cells. I. Involvement of the CD80-CD28 adhesion molecules. ; Schlossman SF et al. 1995. Leucocyte Typing V Oxford University Press. ; Caux et al. 1994. J Exp Med. 180(5):1841-7. PMID: 7525840. ; B70/B7-2 is identical to CD86 and is the major Fn ligand for CD28 expressed on human dendritic cells. ; Engel et al. 1994. Blood. 84(5):1402-7. PMID: 7520767. ; The B7-2 (B70) costimulatory molecule expressed by monocytes and activated B lymphocytes is the CD86 differentiation antigen. ; Nozawa et al. 1993. J Pathol. 169(3):309-15. PMID: 8492223. ; A novel monoclonal antibody (FUN-1) identifies an activation antigen in cells of the B-cell lineage and Reed-Sternberg cells.