

CD22 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1851a

Specification

CD22 Antibody - Product Information

Application E, WB, IF, FC
Primary Accession P20273
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1

Calculated MW 95.3kDa KDa

Description

CD22 may be involved in the localization of B-cells in lymphoid tissues. Binds sialylated glycoproteins; one of which is CD45. Preferentially binds to alpha-2,6-linked sialic acid. The sialic acid recognition site can be masked by cis interactions with sialic acids on the same cell surface. Upon ligand induced tyrosine phosphorylation in the immune response seems to be involved in regulation of B-cell antigen receptor signaling. Plays a role in positive regulation through interaction with Src family tyrosine kinases and may also act as an inhibitory receptor by recruiting cytoplasmic phosphatases via their SH2 domains that block signal transduction through dephosphorylation of signaling molecules

Immunogen

Purified recombinant fragment of human CD22 (AA: 621-725) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

CD22 Antibody - Additional Information

Gene ID 933

Other Names

B-cell receptor CD22, B-lymphocyte cell adhesion molecule, BL-CAM, Sialic acid-binding Ig-like lectin 2, Siglec-2, T-cell surface antigen Leu-14, CD22, CD22, SIGLEC2

Dilution

E~~1/10000 WB~~1/500 - 1/2000 IF~~1/200 - 1/1000 FC~~1/200 - 1/400

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CD22 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



CD22 Antibody - Protein Information

Name CD22 {ECO:0000303|PubMed:1691828, ECO:0000312|HGNC:HGNC:1643}

Function

Mediates B-cell B-cell interactions. May be involved in the localization of B-cells in lymphoid tissues. Binds sialylated glycoproteins; one of which is CD45. Preferentially binds to alpha-2,6-linked sialic acid. The sialic acid recognition site can be masked by cis interactions with sialic acids on the same cell surface. Upon ligand induced tyrosine phosphorylation in the immune response seems to be involved in regulation of B-cell antigen receptor signaling. Plays a role in positive regulation through interaction with Src family tyrosine kinases and may also act as an inhibitory receptor by recruiting cytoplasmic phosphatases via their SH2 domains that block signal transduction through dephosphorylation of signaling molecules.

Cellular Location

Cell membrane; Single-pass type I membrane protein

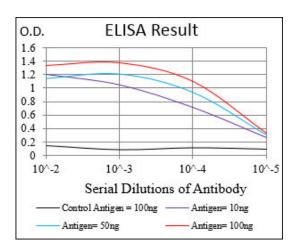
Tissue Location

B-lymphocytes.

CD22 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture





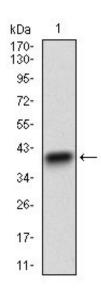


Figure 1: Western blot analysis using CD22 mAb against human CD22 recombinant protein. (Expected MW is 37 kDa)

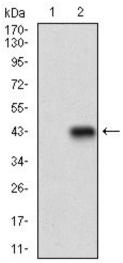


Figure 2: Western blot analysis using CD22 mAb against HEK293 (1) and CD22 (AA: 621-725)-hlgGFc transfected HEK293 (2) cell lysate.

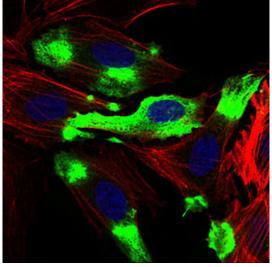


Figure 3: Immunofluorescence analysis of Hela cells using CD22 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



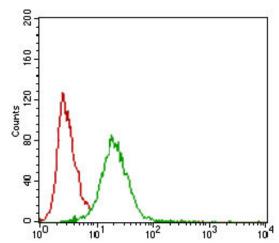


Figure 4: Flow cytometric analysis of Hela cells using CD22 mouse mAb (green) and negative control (red).

CD22 Antibody - Background

CD22 may be involved in the localization of B-cells in lymphoid tissues. Binds sialylated glycoproteins; one of which is CD45. Preferentially binds to alpha-2,6-linked sialic acid. The sialic acid recognition site can be masked by cis interactions with sialic acids on the same cell surface. Upon ligand induced tyrosine phosphorylation in the immune response seems to be involved in regulation of B-cell antigen receptor signaling. Plays a role in positive regulation through interaction with Src family tyrosine kinases and may also act as an inhibitory receptor by recruiting cytoplasmic phosphatases via their SH2 domains that block signal transduction through dephosphorylation of signaling molecules;

CD22 Antibody - References

1. Cancer Res. 2012 Nov 1;72(21):5556-65. 2. J Innate Immun. 2011;3(4):411-9.