

Anti-Siglec-2 / CD22 Reference Antibody (NCI m972)

Recombinant Antibody Catalog # APR11036

Specification

Anti-Siglec-2 / CD22 Reference Antibody (NCI m972) - Product Information

Application FC, E, FTA
Primary Accession P20273
Reactivity Human
Clonality Monoclonal
Isotype IgG1
Calculated MW 144.3 KDa

Anti-Siglec-2 / CD22 Reference Antibody (NCI m972) - Additional Information

Target/Specificity Siglec-2 / CD22

Endotoxin

< 0.001EU/ µg,determined by LAL method.

Conjugation Unconjugated

Expression system

CHO Cell

Format

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

Anti-Siglec-2 / CD22 Reference Antibody (NCI m972) - Protein Information

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

Function

Most highly expressed siglec (sialic acid-binding immunoglobulin-like lectin) on B-cells that plays a role in various aspects of B-cell biology including differentiation, antigen presentation, and trafficking to bone marrow (PubMed:34330755, PubMed:8627166). Binds to alpha 2,6-linked sialic acid residues of surface molecules such as CD22 itself, CD45 and IgM in a cis configuration. Can also bind to ligands on other cells as an adhesion molecule in a trans configuration (PubMed:20172905). Acts as an inhibitory coreceptor on the surface of B-cells and inhibits B-cell receptor induced signaling, characterized by inhibition of the calcium mobilization and cellular activation. Mechanistically, the immunoreceptor tyrosine-based inhibitory motif domain is phosphorylated by the Src kinase LYN, which in turn leads to the recruitment of the protein tyrosine phosphatase 1/PTPN6, leading to the



negative regulation of BCR signaling (PubMed:8627166). If this negative signaling from is of sufficient strength, apoptosis of the B-cell can be induced (PubMed:20516366).

Cellular Location

Cell membrane; Single-pass type I membrane protein

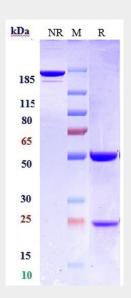
Tissue Location B-lymphocytes.

Anti-Siglec-2 / CD22 Reference Antibody (NCI m972) - Protocols

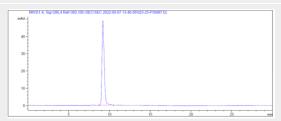
Provided below are standard protocols that you may find useful for product applications.

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

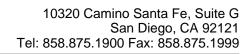
Anti-Siglec-2 / CD22 Reference Antibody (NCI m972) - Images



Anti-Siglec-2 / CD22 Reference Antibody (NCI m972) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-Siglec-2 / CD22 Reference Antibody (NCI m972)is more than 100%, determined





by SEC-HPLC.