

### Anti-Siglec-2 / CD22 Reference Antibody (NCI m971)

Recombinant Antibody Catalog # APR11035

#### **Specification**

# Anti-Siglec-2 / CD22 Reference Antibody (NCI m971) - Product Information

Application FC, E, FTA
Primary Accession P20273
Reactivity Human
Clonality Monoclonal
Isotype IgG1
Calculated MW 146.64 KDa

Anti-Siglec-2 / CD22 Reference Antibody (NCI m971) - 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 m971) - 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:<a href="http://www.uniprot.org/citations/34330755" target="\_blank">34330755</a>, PubMed:<a href="http://www.uniprot.org/citations/8627166" target="\_blank">8627166</a>). 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:<a href="http://www.uniprot.org/citations/20172905" target="\_blank">20172905</a>). 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:<a href="http://www.uniprot.org/citations/8627166" target="\_blank">8627166</a>). If this negative signaling from is of sufficient strength, apoptosis of the B-cell can be induced (PubMed:<a href="http://www.uniprot.org/citations/20516366" target="\_blank">20516366</a>).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein

# Tissue Location

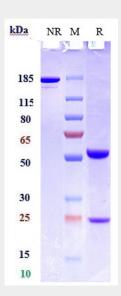
B-lymphocytes.

# Anti-Siglec-2 / CD22 Reference Antibody (NCI m971) - Protocols

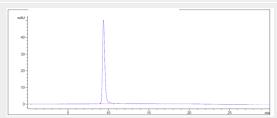
Provided below are standard protocols that you may find useful for product applications.

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

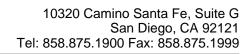
# Anti-Siglec-2 / CD22 Reference Antibody (NCI m971) - Images



Anti-Siglec-2 / CD22 Reference Antibody (NCI m971) 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 m971)is more than 100%, determined





by SEC-HPLC.