

#### Anti-Siglec-2 / CD22 Reference Antibody (pinatuzumab) Recombinant Antibody Catalog # APR10088

## Specification

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

Application Primary Accession Reactivity Clonality Isotype Calculated MW FC, Kinetics, Animal Model <u>P20273</u> Human Monoclonal IgG1 146.64 KDa

## Anti-Siglec-2 / CD22 Reference Antibody (pinatuzumab) - 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 (pinatuzumab) - 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">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

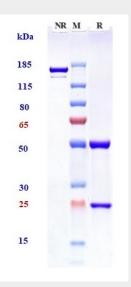
Tissue Location B-lymphocytes.

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

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

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

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

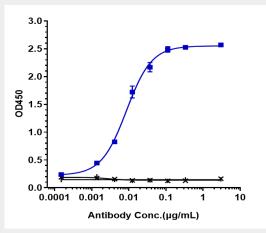


Anti-Siglec-2 / CD22 Reference Antibody (pinatuzumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%

60-									1																
50-																									
40-																									
<sup>™</sup> 30-																									
20-																									
10-																									
0-		_	_	_		_	_	-	1	Ļ			_	_			_	_	_	_			_	_	
	i	2	3	4	5	6	7	8	9	10	11	12 Time	13	14	15	16	17	18	19	20	21	22	23	24	25

The purity of Anti-Siglec-2 / CD22 Reference Antibody (pinatuzumab)is more than 97.02% ,determined by SEC-HPLC.





Immobilized human CD22 His at 2  $\,\mu\text{g/mL}$  can bind Anti-Siglec-2 / CD22 Reference Antibody (pinatuzumab)]EC50=0.008601  $\mu\text{g/mL}$