

Product datasheet for **SC311315**

CD22 (NM_001771) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: CD22 (NM_001771) Human Untagged Clone
Tag: Tag Free
Symbol: CD22
Synonyms: SIGLEC-2; SIGLEC2
Mammalian Cell Selection: None
Vector: pCMV6-XL5
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001771 edited
GGCCGAGACACGGTGCAGTGCCTGTGCGTGGTGAAGTCCAACCCGGAGCCGTCCGTGGCC
TTTGAGCTGCCATCGCGCAATGTGACCGTGAACGAGAGCGAGCGGGAGTTCGTGTACTCG
GAGCGCAGCGCCCTCGTGCTCACCAGCATCCTCACGCTGCGGGGGCAGGCCCCAGGCCCCG
CCCCGCGTCATCTGCACCGCAGGAACCTCTATGGCGCCAAGAGCCTGGAGCTGCCTTC
CAGGGAGCCATCGACTGATGTGGGCCAAGATCGGGCCTGTGGCGCCGTGGTCGCCTTT
GCCATCCTGATTGCCATCGTCTGTACATTACCCAGACACGCAGGAAAAAGAACGTGACA
GAGAGCCCCAGCTTCTCGGCAGGGGACAACCTCCCGTCTGTTCCAGCAGCGACTCCGC
ATCTCTGGGGCACCAGAGAAGTACGAGATGCTGCCAGGGTCCCTGAAGAGGAAGACACG
CGGAAACAGGCTTGCACCCAGACACGACCCATGCATCTCCTCGGCCCTGGCTCCTGCT
CCTGGTTCTAGAATACTTGGCTTTCTCTGACTCAAGTAAATGGGTTTTTGAGCACCTGA
AACCTCTACGCCTGGGAGGGGGCTGCGTCTGGATCCCCTGCACCTACAGAGCCCTAGA
TGGTGACCTGGAAAGCTTCATCCTGTTCCACAATCCTGAGTATAACAAGAACACCTCGAA
GTTTGATGGGACAAGACTCTATGAAAGCACAAGGATGGGAAGGTTCTTCTGAGCAGAA
AAGGGTGCAATTCCTGGGAGACAAGAATAAGAACTGCACACTGAGTATCCACCCGGTGCA
CCTCAATGACAGTGGTACAGTGGGGCTGAGGATGGAGTCCAAGACTGAGAAATGGATGGA
ACGAATACACCTCAATGTCTGAAAGGCCTTTCCACCTCATATCCAGCTCCCTCCAGA
AATTCAAGAGTCCCAGGAAGTCACTCTGACCTGCTTGTGAATTTCTCCTGCTATGGGTA
TCCGATCCAATTGCAGTGGCTCCTAGAGGGGGTTCCAATGAGGCAGGCTGTGTACCTC
GACCTCCTTGACCATCAAGTCTGTCTTACCCCGAGCGAGCTCAAGTTCTCCCCACAGTG
GAGTCACCATGGGAAGATTGTGACCTGCCAGCTTCAGGATGCAGATGGGAAGTTCCTCTC
CAATGACACGGTGCAGCTGAACGTGAAGCACACCCGAAGTTGGAGATCAAGGCTACTCC
CAGTGATGCCATAGTGAGGGAGGGGACTCTGTGACCATGACCTGCGAGGTGAGCAGCAG
CAACCCGAGTACACGACGGTATCCTGGCTCAAGGATGGGACCTCGTGAAGAAGCAGAA
TACATTACGCTAAACCTGCGCGAAGTGACCAAGGACCAGAGTGGGAAGTACTGTGTCA
GGTCTCCAATGACGTGGGCCCGGAAGGTGGAAGAAGTGTTCCTGCAAGTGCAGTATGC
CCCGAACCTTCCACGGTTCAGATCCTCCTCACTCACCGGCTGTGGAGGAAGTCAAGTCA



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GTTCTTTGCATGTCACTGGCCAATCCTCTTCCAACAAATTACACGTGGTACCACAATGG
 GAAAGAAATGCAGGGAAGGACAGAGGAGAAAGTCCACATCCCAAAGATCCTCCCCTGGCA
 CGCTGGGACTTATTCCTGTGTGGCAGAAAAATTCTTGGTACTGGACAGAGGGGCCCGGG
 AGCTGAGCTGGATGTCCAGTATCCTCCCAAGAAGGTGACCACAGTGATTCAAAACCCAT
 GCCGATTCCGAGAAGGAGACACAGTGACCCTTTCCTGTAACATAATTCCAGTAACCCAG
 TGTTACCCGGTATGAATGAAAACCCCATGGCGCCTGGGAGGAGCCATCGCTTGGGGTGCT
 GAAGATCCAAAACGTTGGCTGGGACAACAACCATCGCCTGCGCAGCTTGTAAATAGTTG
 GTGCTCGTGGGCCTCCCCTGTGCGCCTGAATGTCCAGTATGCCCCCGAGACGTGAGGGT
 CCGGAAAAATCAAGCCCTTTCGAGATTCACTCTGAAAACCTCGGTGAGCCTCCAATGTGA
 CTTCTCAAGCAGCCACCCCAAAGAAGTCCAGTTCTTCTGGGAGAAAAATGGCAGGCTTCT
 GGGGAAAGAAAGCCAGCTGAATTTTACTCCATCTCCCAAGAAGATGCTGGGAGTTACAG
 CTGCTGGGTGAACAACCTCATAGGACAGACAGCGTCCAAGGCCTGGACACTTGAAGTGCT
 GTATGCACCCAGGAGGCTGCGTGTGTCCATGAGCCCGGGGACCAAGTATGGAGGGGAA
 GAGTGCAACCCTGACCTGTGAGAGCGACCCAACCTCCCGTCTCCCACTACACCTGGTT
 TGACTGGAATAACCAAAGCCTCCCCTACCACAGCCAGAAGCTGAGATTGGAGCCGGTGAA
 GGTCCAGCACTCGGGTGCCTACTGGTGCCAGGGGACCAACAGTGTGGGCAAGGGCCGTTT
 GCCTCTCAGCACCTCACCGTCTACTATAGCCCGGAGACCATCGGCAGGCGAGTGCTGT
 GGGACTCGGGTCTGCTCGCCATCCTCATCTGGCAATCTGTGGGCTCAAGCTCCAGCG
 ACGTTGGAAGAGGACACAGAGCCAGCAGGGGCTTCAAGGAAATTCAGCGGCCAGAGCTT
 CTTTGTGAGGAATAAAAAGGTTAGAAGGGCCCCCTCTCTGAAGGCCCACTCCCTGGG
 ATGCTACAATCCAATGATGGAAGATGGCATTAGCTACACCACCCTGCGCTTTCGGAGAT
 GAACATACCACGAAGTGGAGATGCAGAGTCCTCAGAGATGCAGAGACCTCCCCGGACTG
 CGATGACACGGTCACTTATTCAGCATTGCACAAGCGCCAAGTGGGCGACTATGAGAACGT
 CATTCCAGATTTTCCAGAAGATGAGGGGATTCATTACTCAGAGCTGATCCAGTTTGGGGT
 CGGGGAGCGGCCTCAGGCACAAGAAAATGTGGACTATGTGATCCTCAAACATTGACACTG
 GATGGGCTGCAGCAGAGGCACTGGGGGAGCGGGGCCAGGGAAGTCCCCGAGTTTCCCC
 AGACACCGCCACATGGCTTCTCCTGCGCGCATGTGCGCACACACACACACACGCACA
 CACACACACACACTCACTGCGGAGAACCTTGTGCTGGCTCAGAGCCAGTCTTTTTGG
 TGAGGGTAACCCCAAACCTCCAAAACCTGCCCCTGTTCTCTTCCACTCTCCTTGCTAC
 CCAGAAATCCATCTAAATACCTGCCCTGACATGCACACCTCCCCCTGCCCCACCACGGC
 CACTGGCCATCTCCACCCCAAGTGTCTTGTGCTCCTGGGATCTGCTGTCATCATT
 TTCTTCCCTTCTCCATCTCTGCGCCTTACCCTGATCTGACATCCCCACTCACGAA
 TATTATGCCAGTTTCTGCCTCTGAGGGAAGCCAGAAAAGGACAGAAACGAAGTAGAA
 AGGGGCCAGTCTGGCCTGGCTTCTCCTTTGGAAGTGAGGCATTGCACGGGAGACGTA
 CGTATCAGCGGCCCTTGACTCTGGGACTCCGGGTTTGAAGTGGACACACTGGTGTGGA
 TTAACCTGCCAGGAGACAGAGCTACAATAAAAATGGCTCAGATGCCACTTCAAAAAA
 AAAAAAA

Restriction Sites: Please inquire
ACCN: NM_001771
Insert Size: 3700 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: The ORF of this clone has been fully sequenced and found to contain 4 SNPs compared with NM_001771.1.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001771.1](#), [NP_001762.1](#)

RefSeq Size: 3260 bp

RefSeq ORF: 2544 bp

Locus ID: 933

UniProt ID: [P20273](#)

Cytogenetics: 19q13.12

Domains: ig, IGc2, IG

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: B cell receptor signaling pathway, Cell adhesion molecules (CAMs), Hematopoietic cell lineage

Gene Summary:

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.

[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).