

## Product datasheet for **RG231365**

### CD22 (NM\_001185101) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CD22 (NM_001185101) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CD22
Synonyms:	SIGLEC-2; SIGLEC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG231365 representing NM\_001185101  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGCATCTCCTCGGCCCTGGCTCCTGCTCCTGGTTCTAGAATACTTGGCTTTCTCTGACTCAAGTAAAT  
GGGTTTTTGAGCACCTGAAACCCTCTACGCCTGGGAGGGGCCTGCGTCTGGATCCCCTGCACCTACAG  
AGCCCTAGATGGTGACCTGGAAGCTTTCATCCTGTTCCACAATCCTGAGTATAACAAGAACACCTCGAAG  
TTTGATGGGACAAGACTCTATGAAAGCACAAGGATGGGAAGGTTCTTCTGAGCAGAAAAGGTGCAAT  
TCCTGGGAGACAAGAATAAGAACTGCACACTGAGTATCCACCCGGTGCACCTCAATGACAGTGGTCAGCT  
GGGGCTGAGGATGGAGTCCAAGACTGAGAAATGGATGGAACGAATACACCTCAATGTCTCTGAAAGGCC  
TTTCCACCTCATATCCAGCTCCCTCCAGAAATCAAGAGTCCCAGGAAGTCACTCTGACCTGCTTGTCTGA  
ATTTCTCCTGCTATGGGTATCCGATCCAATTGCAGTGGCTCCTAGAGGGGTTCCAATGAGGCGAGCTGC  
TGTCACCTCGACCTCCTTGACCATCAAGTCTGTCTTACCCTGGAGCGAGCTCAAGTTCTCCACAGTGG  
AGTCACCATGGGAAGATTGTGACCTGCCAGCTTCAAGATGCAGATGGGAAGTTCCCTCTCCAATGACACGG  
TGCAGCTGAACGTGAAGCATCCTCCCAAGAAGGTGACCACAGTATTCAAACCCCATGCCGATTGAGA  
AGGAGACACAGTGACCTTTCTGTAACATAAATTCCAGTAAACCCAGTGTACCCGGTATGAATGGAAA  
CCCCATGGCGCCTGGGAGGAGCCATCGCTTGGGGTGTGAAGTCCAAAACGTTGGCTGGGACAACACAA  
CCATCGCTGCGCAGCTTGAATAGTTGGTGTCTGTGGGCTCCCTGTCCGCTGAATGTCCAGTATGC  
CCCCGAGACGTGAGGGTCCGAAAATCAAGCCCTTCCGAGATCACTCTGAAAACCGGTGACGCTC  
CAATGTGACTTCTCAAGCAGCCACCCAAAGAAGTCCAGTTCTTCTGGGAGAAAAATGGCAGGCTTCTGG  
GGAAAGAAAGCCAGCTGAATTTTGACTCCATCTCCCAGAAGATGCTGGGAGTTACAGCTGCTGGGTGAA  
CAACTCCATAGGACAGACAGCGTCCAAGCCTGGACACTTGAAGTGTGTATGCACCCAGGAGGCTGCGT  
GTGTCCATGAGCCCGGGGACCAAGTGTGAGGGGAAGAGTGAACCCCTGACCTGTGAGAGCGACGCCA  
ACCCTCCCGTCTCCCACTACACCTGTTTACTGGAATAACCAAAGCCTCCCTACCACAGCCAGAAGCT  
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GGCCGTTGCTCTCAGCACCTCACCGTCTACTATAGCCCGGAGACCATCGGCAGGCGAGTGGCTGTGG  
GACTCGGGTCTGCTCGCCATCCTCATCTGGCAATCTGTGGGCTCAAGCTCCAGCGACGTTGGAAGAG  
GACACAGAGCCAGCAGGGGCTTCCAGGAGAATCCAGCGGCCAGAGCTTCTTTGTGAGGAATAAAAAGTT  
AGAAGGGCCCCCTCTGAAGGCCCCACTCCCTGGGATGCTACAATCCAATGATGGAAGATGGCATT  
GCTACACCACCCTGCGCTTCCCGAGATGAACATACCACGAACTGGAGATGCAGAGTCTCAGAGATGCA  
GAGACCTCCCCGGACTGCGATGACACGGTCACTTATTACGATTGCACAAGCGCAAGTGGGCGACTAT  
GAGAAGCTCATTCCAGATTTTCCAGAAGATGAGGGGATCATTACTCAGAGCTGATCCAGTTTGGGGTGC  
GGGAGCGGCTCAGGCACAAGAAAATGTGGACTATGTGATCCTCAAACAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG231365 representing NM\_001185101  
 Red=Cloning site Green=Tags(s)

MHLLGPWLLLLVLEYLAFSDSSKWVFEHPETLYAWEGACVWIPCTYRALDGDLESFILFHNPEYNKNTSK  
 FDGTRL YESTKDGKVPSEQKRVQFLGDKNKNCTLSIHPVHLNDSGQLGLRMESKTEKWMERIHLNVSERP  
 FPPHIQLPPEIQESQEVTLTCLLNFSYGYPIQLQWLLLEGVPMRQAAVTSTSLTIKSVFTRSELKFSQW  
 SHHGKIVTCQLQDADGKFLSNDTVQLNVKHPPKVTTVIQNPMPIREGDTVTLSCNYNSSNPSVTRYEWK  
 PHGAWEEPVLGVLKIQNVGWDNTTIACAACNSWCSWASPVALNVQYAPRDVVRKIKPLSEIHSNGSVSL  
 QCDFSSSHPKVQFFWEKNGRLLGKESQLNFDISI SPEDAGSYSCWVNNISIGQTASKAWTLEVL YAPRRLR  
 VSMSPGDQVMEGKSATLTCESDANPPVSHYTWFDWNNQSLPYHSQKLRLEPVKVQHSGAYWCQGTNSVGK  
 GRSPLSTLTVVYSPETIGRRVAVGLGCLAAILILAICGLKLRRWKRTQSQQGLQENSSGQSFFVRNKKV  
 RRAPLSEPHSLGCYNPMMEDGISYTTLRPEMNIPTGDAESSEMQRPPPCDDT VTY SALHQRVGDY  
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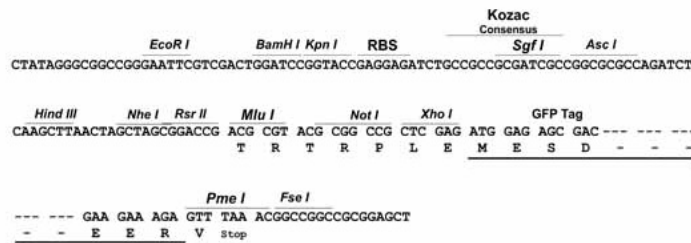
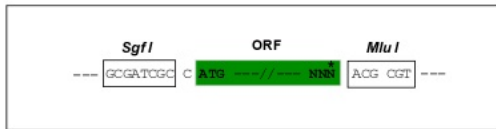
TRTRPLE - GFP Tag - V

Restriction Sites:

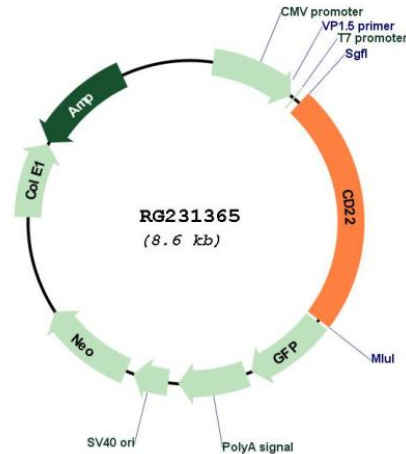
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



## Plasmid Map:



ACCN: NM\_001185101

ORF Size: 2010 bp

OTI Disclaimer: 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: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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\\_001185101.1](#), [NP\\_001172030.1](#)

RefSeq Size:	2769 bp
RefSeq ORF:	2013 bp
Locus ID:	933
UniProt ID:	<a href="#">P20273</a>
Cytogenetics:	19q13.12
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	B cell receptor signaling pathway, Cell adhesion molecules (CAMs), Hematopoietic cell lineage
Gene Summary:	<p>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.</p> <p>[UniProtKB/Swiss-Prot Function]</p>