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Product datasheet for RC207023L4V

CD33 (NM_001772) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	CD33 (NM_001772) Human Tagged ORF Clone Lentiviral Particle
Symbol:	CD33
Synonyms:	p67; SIGLEC-3; SIGLEC3
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001772
ORF Size:	1092 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC207023).
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.
RefSeq:	NM_001772.2, NP_001763.2
RefSeq Size:	1466 bp
RefSeq ORF:	1095 bp
Locus ID:	945
UniProt ID:	P20138
Cytogenetics:	19q13.41
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Hematopoietic cell lineage

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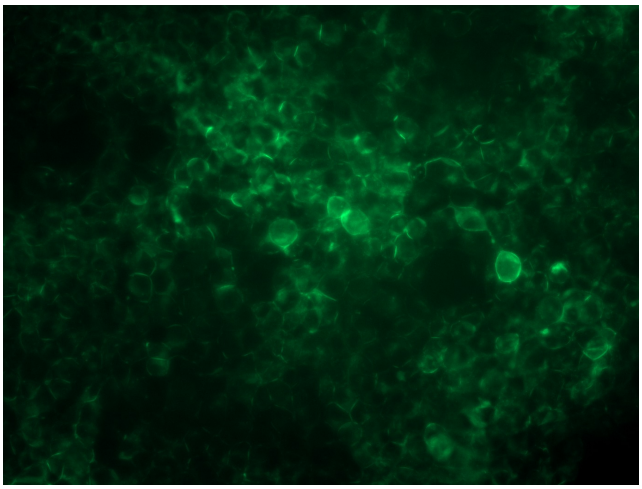
MW: 39.7 kDa

Gene Summary: Sialic-acid-binding immunoglobulin-like lectin (Siglec) that plays a role in mediating cell-cell interactions and in maintaining immune cells in a resting state (PubMed:10611343, PubMed:15597323, PubMed:11320212). Preferentially recognizes and binds alpha-2,3- and more avidly alpha-2,6-linked sialic acid-bearing glycans (PubMed:7718872). Upon engagement of ligands such as C1q or syalylated glycoproteins, two immunoreceptor tyrosine-based inhibitory motifs (ITIMs) located in CD33 cytoplasmic tail are phosphorylated by Src-like kinases such as LCK (PubMed:28325905, PubMed:10887109). These phosphorylations provide docking sites for the recruitment and activation of protein-tyrosine phosphatases PTPN6/SHP-1 and PTPN11/SHP-2 (PubMed:10556798, PubMed:10206955, PubMed:10887109). In turn, these phosphatases regulate downstream pathways through dephosphorylation of signaling molecules (PubMed:10206955, PubMed:10887109). One of the repressive effect of CD33 on monocyte activation requires phosphoinositide 3-kinase/PI3K (PubMed:15597323).[UniProtKB/Swiss-Prot Function]

Product images:



[RC207023L4] was used to prepare Lentiviral particles using [TR30037] packaging kit. HEK293T cells were transduced with RC207023L4V particle to overexpress human CD33-mGFP fusion protein.