

Product datasheet for **RC222914**

CD57 (B3GAT1) (NM_018644) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD57 (B3GAT1) (NM_018644) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CD57
Synonyms:	CD57; GLCATP; GLCUATP; HNK1; LEU7; NK-1; NK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222914 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGAAGAGACGGGACATCCTAGCGATCGTCCTCATCGTGCTGCCCTGGACTCTGCTCATCACTGTCT
GGCACCAGAGCACCCTCGCACCCTGCTCGCGGTACATAAGGATGAGGGCAGTGACCCCCGACGCGAAAC
GCCGCCCGGCCGACCCAGGGAGTACTGCACGTCTGACCGGACATCGTGGAGGTGGTGGCACCAG
TACGTGTACACGCGGCCCGCCATGGTCCGACACGCTGCCACCATCCACGTGGTACGCCACCTACA
GCCGCCCGGTGCAGAAGGCCGAGCTGACGCGCATGGCCAACACGCTGCTGCACGTGCCAACCTCCACTG
GCTGGTGGTGGAGGATGCGCCGCCCGGACGCCGCTGACCGCGCGCTGCTGCGGACACCGGCCTCAAC
TACACGCACCTGCACGTGGAGACGCCCCGCAACTACAAGCTGCGCGGAGACGCCCGGACCCACGCATCC
CGCGGGGCACCATGCAGCGCAACTGGCCCTGCGCTGGCTGCGCGAGACCTTCCCGCGCAACTCCAGCCA
GCCTGGCGTGGTCTACTTCGCCGACGACGACAACCTACAGCCTGGAGCTCTTGAAGAGATGCGCAGC
ACCAGGAGGGTGTCCGTGTGGCCCGTCCGCTTCGTGGGTGGCCTGCGGTACGAGGCCACCGGTGAACG
GGCAGGAAGGTGGTGGCTGGAAGACGGTGTGGACCCACCGGCCATTTGAATAGACATGGCTGG
ATTTGCCGTCAACTGCGGCTCATTCTGCAGCGAAGCCAGGCCTACTTCAAGCTGCGAGGTGTGAAGGGA
GGCTACCAGGAAAGCAGCCTCCTTCGAGAACTTGTACCCTCAACGACCTGGAGCCCAAGGCAGCCA
GCACCAAGATCCTGGTGTGGCACACACGGACAGAGAAGCCAGTGGTGAATGAGGGCAAGAAGGGCTT
CACTGACCCCTCGGTGGAGATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC222914 protein sequence
Red=Cloning site Green=Tags(s)

MPKRRDILAIVLIVLPWTLITVWHQSTLAPLLAVHKDEGSDPRETPPGADPREYCTSDRDIVEVVRTE
 YVYTRPPPWSDTLPTIHVVTPITYSRPVQKAE LTRMANTLLHVPNLHVLVVEDAPRRTPLTARLLRDTGLN
 YTHLHVETPRNYKLRGDARDPRIPRGTMQRNALRLWRETFPRNSSQPGVVYFADDNTYSLELFEEMRS
 TRRVSVVPVAFVGGRLRYEAPRVNGAGKVVGWKTVFDPHRPFAIDMAGFAVNLRLILQRSQAYFKLRGVKG
 GYQESSLLRELVTLNDLEPKAANCTKILVWHTRTEKPVLVNEGKKGFTDPSVEI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6302_f05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_018644

ORF Size: 1002 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_018644.3](#)

RefSeq Size: 3534 bp

RefSeq ORF: 1005 bp

Locus ID: 27087

UniProt ID: [Q9P2W7](#)

Cytogenetics: 11q25

Domains: Glyco_transf_43

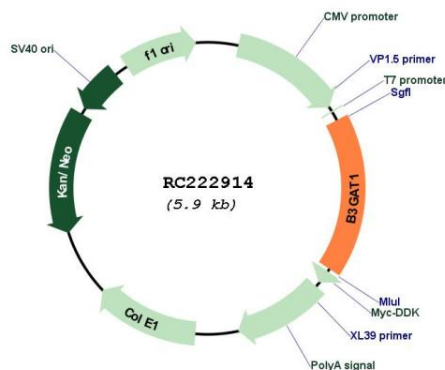
Protein Families: Transmembrane

Protein Pathways: Chondroitin sulfate biosynthesis, Heparan sulfate biosynthesis, Metabolic pathways

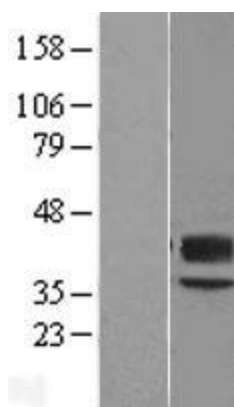
MW: 38.3 kDa

Gene Summary: The protein encoded by this gene is a member of the glucuronyltransferase gene family. These enzymes exhibit strict acceptor specificity, recognizing nonreducing terminal sugars and their anomeric linkages. This gene product functions as the key enzyme in a glucuronyl transfer reaction during the biosynthesis of the carbohydrate epitope HNK-1 (human natural killer-1, also known as CD57 and LEU7). Alternate transcriptional splice variants have been characterized. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC222914



Western blot validation of overexpression lysate (Cat# [LY412987]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222914 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).