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Product datasheet for SC109880

Vinculin (VCL) (NM_014000) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Vinculin (VCL) (NM_014000) Human Untagged Clone
Tag:	Tag Free
Symbol:	VCL
Synonyms:	CMD1W; CMH15; HEL114; MV; MVCL
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>NCBI ORF sequence for NM_014000, the custom clone sequence may differ by one or more nucleotides

ATGCCAGTGTTTCATACGCGCACGATCGAGAGCATCCTGGAGCCGGTGGCACAGCAGATCTCCCACCTGG
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TCGGCAAGATCTTCTCGCCAAGTGTGACCGAGTGGACCAGCTGACAGCCCAGCTGGCTGACCTGGCTGCC

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AGAGGGGAAGGGGAGAGTCCTCAGGCACGAGCACTTGCATCTCAGCTCCAAGACTCCTTAAAGGATCTAA
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_014000 unedited
GGTTCAAATTTTGTATACGACTCCTATAGGGCGGCCGCGATTCGGCACGAGGCCGGTTCC
CGGCCCCGTGGATCCTACTTCTCTGTCGCCCGCGGTTCGCCGCCCCGCTCGCCGCCGCGA
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CAAGGCCCCTGACCATGANGAAGCTTTGCCTCCTAAACTCAAATGGACCGGC

3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_014000 unedited
NNNCCGTCCTGNACCGCGGCCGCAATCTANGATCGGTTTTTTTTTTTTTTTTTTAATTT
GCTTCACTGTGTCTCGAGCACTGATTTGGAGAAAAGCACATCCGGCATAAAGTGTAAACC
AGTGTCTCAAACCACTGGAAGAACCGGGAGAGCAAACATGATTTTTCTTATTTCCTCTAA
GTAATCTTTCTTTAGTAAAACAACAAGTGATCTTTGGCATAGATTCATACTTTAAAGGCA
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GTAGGAACTTACTGTGGGGATAAGAAATCTGAACCCCCTTCCTCCCTCTGACCCCGTCCT
TCGGGATCTNACGCCACATAGCATTGTTTCTCCTTGCGTCGCCGGGACGCCCACGCCTCA
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ATTCACCCTCCCGCGCCCTTGCGCCACCTCTCCTCTCGATCCACTTATTCCTGCCCCGCG
CTCTAGACTACCTTTGCTGAGTCCGTTATCTAGCTCTTGCTCGTCTCCTGCTCTCCTATA
CCGCCTCCCTCCCGCCTCCACTCTCGTCCCTCTGCTCCCCTTGCCTTGCGTGCTTTTCGT
CCGCCCTGCNACCAACCATAGCCACTTCCTACCCATATCA
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Restriction Sites: NotI-NotI

ACCN: NM_014000

Insert Size: 5450 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_014000.2, NP_054706.1

RefSeq Size: 5647 bp

RefSeq ORF: 3405 bp

Locus ID: 7414

UniProt ID: P18206

Cytogenetics: 10q22.2

Domains: Vinculin

Protein Families: Druggable Genome

Protein Pathways: Adherens junction, Focal adhesion, Leukocyte transendothelial migration, Regulation of actin cytoskeleton

Gene Summary: Vinculin is a cytoskeletal protein associated with cell-cell and cell-matrix junctions, where it is thought to function as one of several interacting proteins involved in anchoring F-actin to the membrane. Defects in VCL are the cause of cardiomyopathy dilated type 1W. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Multiple alternatively spliced transcript variants have been found for this gene, but the biological validity of some variants has not been determined. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (1) differs from variant 2 in having an additional exon in the 3' coding region. It thus encodes a longer isoform (meta-VCL).