

Product datasheet for **RG219299**

Vinculin (VCL) (NM_014000) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Vinculin (VCL) (NM_014000) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	VCL
Synonyms:	CMD1W; CMH15; HEL114; MV; MVCL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219299 representing NM_014000 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>RG219299 representing NM_014000
 Red=Cloning site Green=Tags(s)

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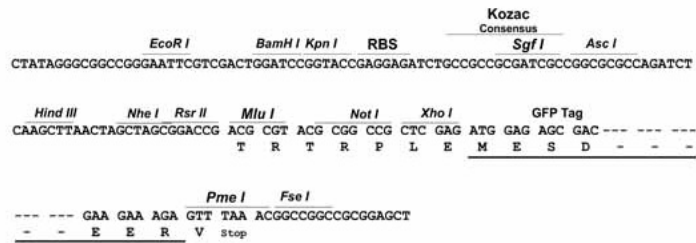
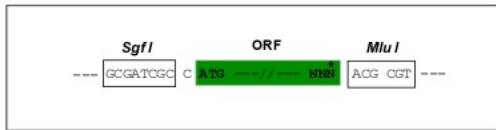
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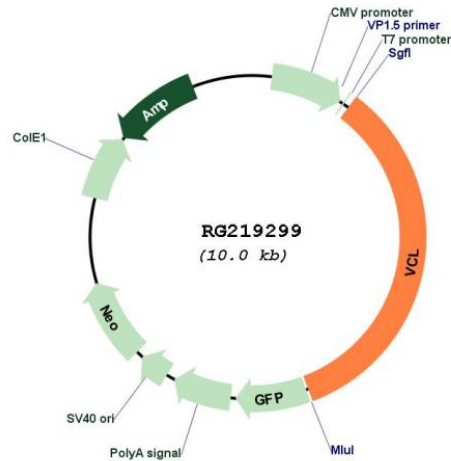
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_014000

ORF Size: 3402 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_014000.3](#)

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]