

Product datasheet for **RC221699**

CD105 (ENG) (NM_000118) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD105 (ENG) (NM_000118) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ENG
Synonyms:	END; HHT1; ORW1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RC221699 representing NM_000118
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

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AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
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Protein Sequence:

>RC221699 representing NM_000118
 Red=Cloning site Green=Tags(s)

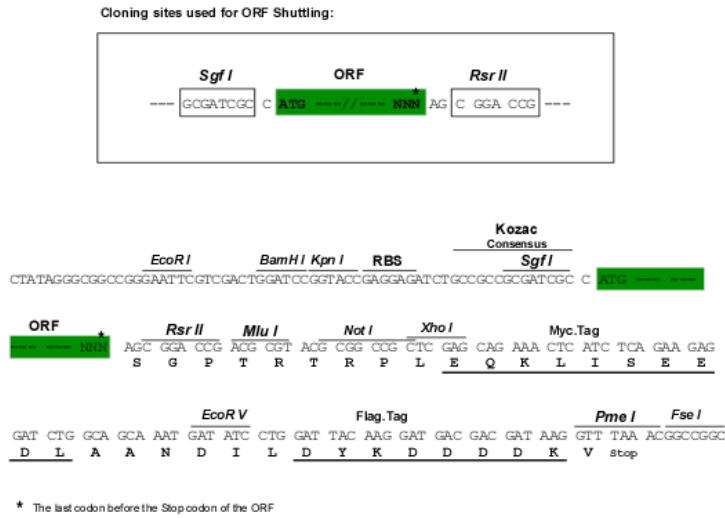
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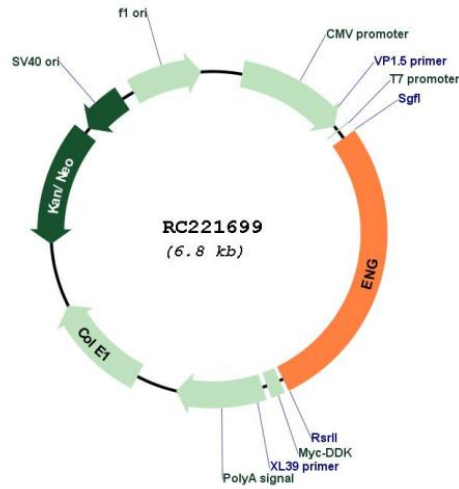
Chromatograms: https://cdn.origene.com/chromatograms/mg2774_c05.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



Plasmid Map:



ACCN: NM_000118

ORF Size: 1884 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_000118.3](#)

RefSeq Size: 3142 bp

RefSeq ORF: 1878 bp

Locus ID: 2022

UniProt ID: [P17813](#)

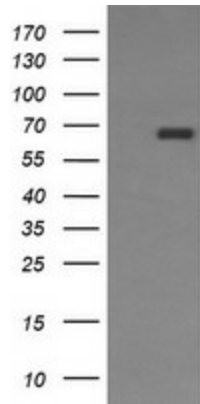
Cytogenetics: 9q34.11

Domains: zona_pellucida

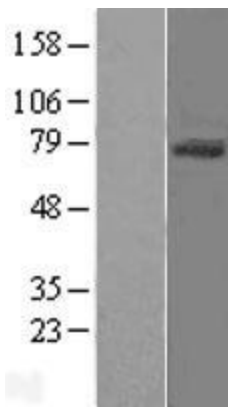
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

MW: 67.78 kDa

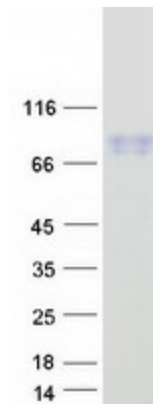
Gene Summary: This gene encodes a homodimeric transmembrane protein which is a major glycoprotein of the vascular endothelium. This protein is a component of the transforming growth factor beta receptor complex and it binds to the beta1 and beta3 peptides with high affinity. Mutations in this gene cause hereditary hemorrhagic telangiectasia, also known as Osler-Rendu-Weber syndrome 1, an autosomal dominant multisystemic vascular dysplasia. This gene may also be involved in preeclampsia and several types of cancer. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2013]

Product images:


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ENG (Cat# RC221699, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ENG(Cat# [TA506170]). Positive lysates [LY424919] (100ug) and [LC424919] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY424919]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221699 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ENG protein (Cat# [TP321699]). The protein was produced from HEK293T cells transfected with ENG cDNA clone (Cat# RC221699) using MegaTran 2.0 (Cat# [TT210002]).