

## Product datasheet for **RG238446**

### CD105 (ENG) (NM\_001278138) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CD105 (ENG) (NM_001278138) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ENG
Synonyms:	END; HHT1; ORW1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238446 representing NM_001278138. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCTGGAAGCCAGCCAGGACATGGGCCGACGCTCGAGTGGCGGCCGCTACTCCAGCCTTGGTCCGG
GGCTGCCACTTGAAGGCGTGGCCGCCACAAGGAGGCGCACATCCTGAGGGTCTGCCGGGCCACTCG
GCCGGGCCCGGACGGTGACGGTGAAGGTGAACTGAGCTGCGCACCCGGGGATCTCGATGCCGTCTC
ATCCTGCAGGGTCCCCCTACGTGCTCTGGCTCATCGACGCCAACACAACATGCAGATCTGGACCACT
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GCCATGACCCTGGTACTAAAGAAAGAGCTTGTTCGCAATTTGAAGTGCACCATCACGGCCCTGACCTTC
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GGCATGCAGGTGTGAGCAAGTATGATCAGCAATGAGGCGGTGGTCAATATCCTGTGAGCTCATACCA
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CACTTCTCCAGGCCTCAACACCATCGAGCCGGGCAGCAGAGCTTTGTGCAGGTGAGAGTGTCCCA
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CCCAGCAAGCGGGAGCCCGTGGTGGCGGTGGCTGCCCCGCTCCTCGGAGAGCAGCAGCACCAACCAC
AGCATCGGGAGCACCCAGAGCACCCCTGCTCCACCAGCAGCATGGCA
AGCGGACCGACCGGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
```



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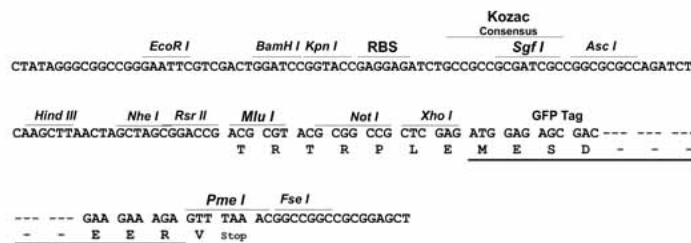
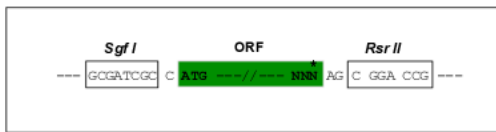
**Protein Sequence:** >Peptide sequence encoded by RG238446  
 Blue=ORF Red=Cloning site Green=Tag(s)

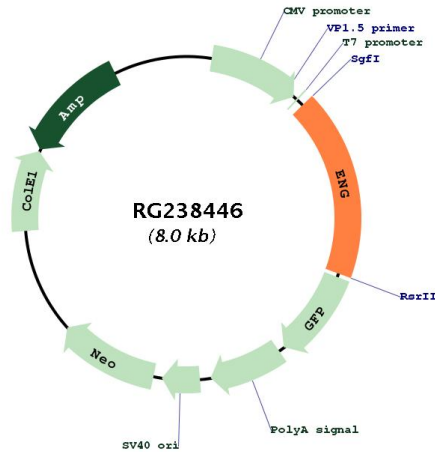
MLEASQDMGR<sup>LEWR</sup>PRTPALVRGCHLEGVAGHKEAHILRVLP<sup>GH</sup>SAGPRTVTVKVELSCAPGDLDAVL  
 ILQ<sup>PPY</sup>YVSWLIDANHNMQI<sup>WT</sup>TGEYSFKIFPEKNIRGFKLPDTPQGLLGEARMLNASIVASFVELPLA  
 SIVSLHAS<sup>CCG</sup>RLQTS<sup>PA</sup>PIQTTPPKDTC<sup>SP</sup>ELLMSLIQTKCADDAMTLV<sup>LK</sup>ELVAHLKCTITGLTF  
 WDPSC<sup>EAE</sup>DRGDKFVLRSA<sup>YSS</sup>CGMQVSASMI<sup>SNE</sup>AVVNILSSSSPQRKKVHCLN<sup>MD</sup>SLSFQLGLYLSP  
 HFLQASNTIEPGQ<sup>QSF</sup>VQVRVSPSVSEFLLQLD<sup>SCH</sup>LDLGP<sup>EG</sup>TVELIQGRAAKGNCV<sup>SLL</sup>SPSPEGD  
 PRFS<sup>FL</sup>LHFYTVPIPKTGL<sup>SCT</sup>VALRPKTGSQDQEVHRTVFMRLNIISPDLSG<sup>CT</sup>SKGLVLP<sup>AV</sup>LGIT  
 FGAFLIGALLTAALWYIYSHTRSPSKREP<sup>VVA</sup>VAA<sup>PAS</sup>SESSSTNHSIGSTQSTPCSTSSMA  
 SGPTRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMKSTKGALTFSPYLL  
 SHVMGYGFYHFGTYP<sup>SG</sup>YENPFLHAINNGGYT<sup>NR</sup>IEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGF  
 PEDSVIFTDKII<sup>RS</sup>NATVEHLHPMGDNDLDGSFTRTFSLRDGGY<sup>YSS</sup>VVDSHM<sup>HF</sup>KS<sup>AI</sup>HPSILQNGGP  
 MFAFR<sup>VE</sup>EDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**Plasmid Map:**


**ACCN:** NM\_001278138

**ORF Size:** 1428 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).

**RefSeq:** [NM\\_001278138.1](#), [NP\\_001265067.1](#)

**RefSeq Size:** 2817 bp

**RefSeq ORF:** 1431 bp

**Locus ID:** 2022

**UniProt ID:** [P17813](#)

**Cytogenetics:** 9q34.11

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

**MW:** 51.6 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]