

## Product datasheet for **RG213951**

### ERVWE1 (ERVW-1) (NM\_014590) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ERVWE1 (ERVW-1) (NM_014590) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ERVWE1
Synonyms:	ENV; ENVW; ERVWE1; HERV-7q; HERV-W-ENV; HERV7Q; HERVW; HERVWENV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG213951 representing NM\_014590  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCCTCCCTATCATATTTTCTCTTACTGTTCTTTACCCTCTTTCCTACTCTCACTGCACCCCTC  
 CATGCCGCTGTATGACCAGTAGCTCCCCTTACCAAGAGTTTCTATGGAGAATGCAGCGTCCCGGAAATAT  
 TGATGCCCATCGTATAGGAGTCTTTCTAAGGGAACCCACCTTCACTGCCACACCCATATGCCCGC  
 AACTGCTACTCTGCCACTCTTGCATGCATGCAAATACTCATTATTGGACAGGAAAAATGATTAATC  
 CTAGTTGTCTGGAGGACTTGGAGTCACTGTCTGTTGGACTTACTTACCCAACTGGTATGTCTGATGG  
 GGGTGGAGTTCAAGATCAGGCAAGAGAAAAACATGTAAGAAGTAATCTCCAACCTCACCCGGTACAT  
 GGCACCTAGCCCTACAAAGGACTAGATCTCTCAAACCTACATGAAACCCTCCGTACCCATACTCGCC  
 TGGTAAGCCTATTTAATACCACCCTCACTGGGCTCCATGAGGTCTCGGCCAAAACCTACTAAGTGTG  
 GATATGCCTCCCCTGAACTTCAAGCCATATGTTTCAATCCCTGTACCTGAACAATGGAACAACCTCAGC  
 ACAGAAATAAACACCACTTCCGTTTTAGTAGGACCTCTTGTTCGAATCTGGAAATAACCCATACCTCAA  
 ACCTCACCTGTGTAATAATTTAGCAATACTACATACACAACCAACTCCCAATGCATCAGGTGGTAACTCC  
 TCCACACAAATAGTCTGCCTACCCTCAGGAATATTTTTGTCTGTGGTACCTCAGCCTATCGTTGTTTG  
 AATGGCTCTCAGAATCTATGTGCTTCTCTCATTCTTAGTGCCCTATGACCATCTACACTGAACAAG  
 ATTTATACAGTTATGTCATATCTAAGCCCCGCAACAAAAGAGTACCCATTCTTCTTTTGTATAGGAGC  
 AGGAGTGTAGGTGCACTAGGTACTGGCATTGGCGGTATCACACCTCTACTCAGTTCTACTACAACTA  
 TCTCAAGAACAATGGGGACATGGAACGGTCCCGACTCCCTGGTCACTTGAAGATCAACTTAACT  
 CCCTAGCAGCAGTAGTCTTCAAATCGAAGACTTTAGACTTGTAAACCCTGAAAGAGGGGAACTCTG  
 TTTATTTTAGGGGAAGAATGCTGTTATTATGTTAATCAATCCGGAATCGTCACTGAGAAAAGTTAAAGAA  
 ATTCGAGATCGAATACAACGTAGAGCAGAGGAGCTTCGAAACACTGGACCCTGGGGCTCTCAGCCAAT  
 GGATGCCCTGGATTCTCCCTTCTTAGGACCTCTAGCAGCTATAAATTGCTACTCCTCTTTGGACCCTG  
 TATCTTTAACCTCCTGTAACTTTGTCTCTTCCAGAATCGAAGCTGTAACACTACAAATGGAGCCCAAG  
 ATGCAGTCCAAGACTAAGATCTACCGCAGACCCCTGGACCAGCCTGCTAGCCACGATCTGATGTTAATG  
 ACATCAAAGGCACCCCTCCTGAGGAAATCTCAGCTGCACAACCTCTACTACGCCCAATTCAGCAGGAAG  
 CAGT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG213951 representing NM\_014590  
 Red=Cloning site Green=Tags(s)

MALPYHIFLFTVLLPSFTLTAPPPCRCMTSSSPYQEFLWRMQRPGNIDAPSYRSLSKGTPPTFAHTHMPR  
 NCYHSATLCMHANTHYWTGKMINPSCPGGLGVTVCWYTFQTGMSDGGGVQDQAREKHVKEVISQLTRVH  
 GTSSPYKGLDL SKLHETLRHTRLVSLFNNTLTGLHEVSAQNPTNCWICLPLNFRPYVSI PVPEQWNNFS  
 TEINTT SVLVGPLVSNLEIHTSNLTCVKFSNTTYTNSQCIRWVTPPTQIVCLPSGIFVCGTSAYRCL  
 NGSSSESMCFLSFLVPPMTIYTEQDLYSYVISKPRNKRVPILPFVIGAGVLGALGTGIGGITTSTQFYK  
 SQELNGDMERVADSLVTLQDQLNSLAAVLQNRALDLLTAERGGTCLFLGEECCYYVNVQSGIVTEKVK  
 IRDRIQRRAEELRNTGPWGLLSQWMPWILPFLGPLAAIILLLLFGPCIFNLLVNFVSSRIEAVKLQMEPK  
 MQSKTKIYRRPLDRPASPRSDVNDIKGTPPEEISAAQPLLRPNSAGSS

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_014590

**ORF Size:** 1614 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](mailto: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.

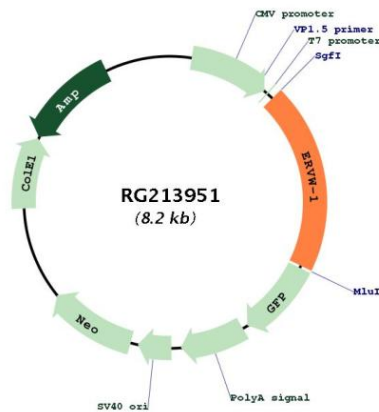
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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\\_014590.3, NP\\_055405.3](#)  
**RefSeq Size:** 3044 bp  
**RefSeq ORF:** 1617 bp  
**Locus ID:** 30816  
**UniProt ID:** [Q9UQF0](#)  
**Cytogenetics:** 7q21.2  
**Domains:** ENV\_polyprotein  
**Protein Families:** Transmembrane  
**Gene Summary:**

Many different human endogenous retrovirus (HERV) families are expressed in normal placental tissue at high levels, suggesting that HERVs are functionally important in reproduction. This gene is part of an HERV provirus on chromosome 7 that has inactivating mutations in the gag and pol genes. This gene is the envelope glycoprotein gene which appears to have been selectively preserved. The gene's protein product is expressed in the placental syncytiotrophoblast and is involved in fusion of the cytotrophoblast cells to form the syncytial layer of the placenta. The protein has the characteristics of a typical retroviral envelope protein, including a furin cleavage site that separates the surface (SU) and transmembrane (TM) proteins which form a heterodimer. Alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Mar 2010]

**Product images:**



Circular map for RG213951