

## Product datasheet for **RC228348**

### ER81 (ETV1) (NM\_001163150) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ER81 (ETV1) (NM_001163150) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ER81
Synonyms:	ER81
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC228348 representing NM\_001163150  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGCTTCAAGATTTAAGTGAAGTGTCTTCTTTCCACCTTGTTTCAACACAGAAGCTTAGCTCAGGTAC  
CTGACAATGATGAGCAGTTTGTACCAGACTATCAGGCTGAAAGTTTGGCTTTTCATGGCCTGCCACTGAA  
AATCAAGAAAGAACCCACAGTCCATGTTTCAAGAAATCAGCTCTGCCTGCAGTCAAGAACAGCCCTTTAAA  
TTCAGCTATGGAGAAAAGTGCCTGTACAATGTCAGTGCCTATGATCAGAAGCCACAAGTGGGAATGAGGC  
CCTCCAACCCCCACACCATCCAGCACGCCAGTGTCCCCACTGCATCATGCATCTCCAACTCACTCA  
TACACCGAAAACCTGACCGGGCTTCCCAGCTCACCTCCCTCCATCGCAGTCCATACCAGATAGCAGCTAC  
CCCATGGACCACAGATTCGCCGCCAGCTTTCTGAACCTGTAACCTTTCTCCTTTGCCGACGATGC  
CAAGGGAAGGACGTCCTATGTACCAACGCCAGATGTCTGAGCCAAACATCCCTTCCCACCACAAGGCTT  
TAAGCAGGAGTACCACGCCAGTGTATGAACACAACACCATGGTTGGCAGTGGCCAGCCAAAGCTTT  
CCCCCTCCTCTGATGATTAACAGGAACCCAGAGATTTTGCATATGACTCAGAAGTGCCTAGCTGCCACT  
CCATTTATATGAGGCAAGAAGGCTTCTGGCTCATCCCAGCAGAACAGAAGGCTGTATGTTTAAAAGGG  
CCCCAGGCAGTTTATGATGACACCTGTGTTGTCCCAGAAAAATTCGATGGAGACATCAACAAGAGCCA  
GGAATGTATCGGGAAGGACCCACATACCAACGGCGAGGATCACTTCAGCTCTGGCAGTTTTTGGTAGCTC  
TTCTGGATGACCTTCAAATTCATTTTATTGCCTGGACTGGTCGAGGCATGGAATTTAACTGATTGA  
GCCTGAAGAGTGGCCGACGTTGGGGCATTGAGAAAAACAGGCCAGCTATGAACTATGATAAATAGC  
CGTTCACTCCGCTATTACTATGAGAAAGGAATTATGAAAAAGGTGGCTGGAGAGAGATATGTCTACAAGT  
TTGTGTGTGATCCAGAAGCCCTTTCTCATGGCCTTTCCAGATAATCAGCGTCCACTGCTGAAGACAGA  
CATGGAACGTACATCAACGAGGAGGACACAGTGCCTCTTTCTCACTTTGATGAGAGCATGGCCTACATG  
CCGGAAGGGGCTGCTGCAACCCCCACCCCTAACGAAGGCTACGTGTAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

## Protein Sequence:

>RC228348 representing NM\_001163150  
Red=Cloning site Green=Tags(s)

MLQDLSASVFFPPCSQHRTLAQVPDNEQFVPDYQAESLAFHGLPLKIKKEPHSPCSEISSACSQEPPFK  
FSYGEKCLYNVSAYDQKPQVGMRPSNPPTPSSTPVSPHASPNSHTPKPDRAFPAPLPPSQSIPDSSY  
PMDHRFRRLSEPCNSFPPLPTMPREGRPMYQRQMSEPNIFFPPQGFQYHDPVVEHNTMVGSAASQSF  
PPPLMIKQEPDFAYDSEVPSCHSIYMRQEGFLAHPSTRTEGCMFEKGPRQFYDDTCVVPEKFDGDIKQEP  
GMYREGPTYQRRGSLQLWQFLVALLDDPSNSHFIAWTGRGMEFKLIEPEEVARRWGIQKNRPAMNYDKLS  
RSLRYYYEKGIMQKVAGERYVYKFCVDPALFMAFPDNQRPLKTDMERHINEEDTVPLSHFDESMAYM  
PEGGCCNPHYNEGYVY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

## Chromatograms:

[https://cdn.origene.com/chromatograms/mk8059\\_h09.zip](https://cdn.origene.com/chromatograms/mk8059_h09.zip)

## Restriction Sites:

Sgfl-Mlul

**Cloning Scheme:**

**ACCN:** NM\_001163150

**ORF Size:** 1311 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).

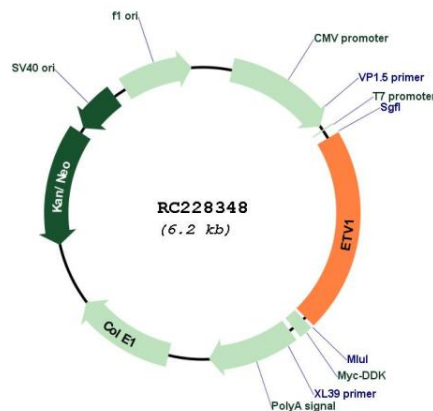
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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\\_001163150.1](#), [NP\\_001156622.1](#)

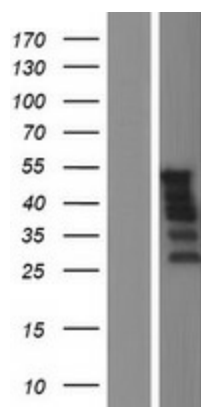
**RefSeq ORF:** 1314 bp  
**Locus ID:** 2115  
**UniProt ID:** [P50549](#)  
**Cytogenetics:** 7p21.2  
**Protein Families:** ES Cell Differentiation/IPS, Transcription Factors  
**MW:** 50 kDa

**Gene Summary:** This gene encodes a member of the ETS (E twenty-six) family of transcription factors. The ETS proteins regulate many target genes that modulate biological processes like cell growth, angiogenesis, migration, proliferation and differentiation. All ETS proteins contain an ETS DNA-binding domain that binds to DNA sequences containing the consensus 5'-CGGA[AT]-3'. The protein encoded by this gene contains a conserved short acidic transactivation domain (TAD) in the N-terminal region, in addition to the ETS DNA-binding domain in the C-terminal region. This gene is involved in chromosomal translocations, which result in multiple fusion proteins including EWS-ETV1 in Ewing sarcoma and at least 10 ETV1 partners (see PMID: 19657377, Table 1) in prostate cancer. In addition to chromosomal rearrangement, this gene is overexpressed in prostate cancer, melanoma and gastrointestinal stromal tumor. Multiple alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2016]

### Product images:



Circular map for RC228348



Western blot validation of overexpression lysate (Cat# [LY431376]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228348 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).