

## Product datasheet for **RC210533**

### ER81 (ETV1) (NM\_004956) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ER81 (ETV1) (NM_004956) 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)



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**ORF Nucleotide Sequence:**

>RC210533 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGATGGATTTTATGACCAGCAAGTGCCTTACATGGTCACCAATAGTCAGCGTGGGAGAAATTGTAACG  
 AGAAACCAACAAATGTCAGGAAAAGAAAATTCATTAACAGAGATCTGGCTCATGATTGAGAAGAACTCTT  
 TCAAGATCTAAGTCAATTACAGGAAACATGGCTTGCAGAAGCTCAGGTACCTGACAATGATGAGCAGTTT  
 GTACCAGACTATCAGGCTGAAAGTTTGGCTTTTCATGGCCTGCCACTGAAAATCAAGAAAGAACCCACACA  
 GTCCATGTTTCAAGAAATCAGCTCTGCCTGCAGTCAAGAACAGCCCTTTAAATTCAGCTATGGAGAAAAGTG  
 CCTGTACAATGTCAGTGCCTATGATCAGAAGCCACAAGTGGGAATGAGGCCCTCAACCCCCCACACCA  
 TCCAGCACGCCAGTGTCCCCTGCATCATGCATCTCCAACTCAACTCATAACCCGAAACCTGACCGGG  
 CCTTCCCAGCTCACCTCCCTCCATCGCAGTCCATACCAGATAGCAGCTACCCCATGGACCACAGATTTCCG  
 CCGCCAGCTTTTGAACCCTGTAACCTTTCTCCTTTGCCGACGATGCCAAGGGAAGGACGTCCTATG  
 TACCAACGCCAGATGTCTGAGCCAAACATCCCCTTCCCACCACAAGGCTTTAAGCAGGAGTACCACGACC  
 CAGTGTATGAACACAACACCATGGTTGGCAGTGCAGCCAGCCAAAGCTTTCCCCCTCCTCTGATGATTAA  
 ACAGGAACCCAGAGATTTTGCATATGACTCAGAAGTGCCTAGCTGCCACTCCATTTATATGAGGCAAGAA  
 GGCTTCTGGCTCATCCCAGCAGAACAGAAGGCTGTATGTTTTGAAAAGGGCCCCAGGCAGTTTTATGATG  
 ACACCTGTGTTGCCAGAAAAATTCGATGGAGACATCAAACAAGAGCCAGGAATGTATCGGGAAGGACC  
 CACATACCAACGGCGAGGATCACTTCAGCTCTGGCAGTTTTTGGTAGCTTTCTGGATGACCCTTCAAT  
 TCTCATTTTATCGCTGGACTGGTCGAGGCATGGAATTTAACTGATTGAGCCTGAAGAGGTGCCCGCAG  
 GTTGGGCATTCAGAAAAACAGGCCAGCTATGAACTATGATAAACTTAGCCGTTCACTCCGCTATTACTA  
 TGAGAAAAGGAATTATGCAAAAAGGTGGCTGAGAGAGATATGTCTACAAGTTTGTGTGTATCCAGAAGCC  
 CTTTTCTCCATGGCCTTTCCAGATAATCAGCGTCCACTGCTGAAGACAGACATGGAACGTACATCAACG  
 AGGAGGACACAGTGCCTCTTTCTCACTTTGATGAGAGCATGGCCTACATGCCGGAAGGGGCTGCTGCAA  
 CCCCCACCCCTACAACGAAGGCTACGTGTAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC210533 protein sequence  
 Red=Cloning site Green=Tags(s)

MDGFYDQQVPMVNTNSQRGRNCNEKPTNVRKRKFINRDLAHDSEELFQDLSQLQETWLAEAQVPDNDEQF  
 VPDYQAESLAFHGLPLKIKKEPHSPCSEISSACSQEPPFKFSYGEKCLYNVSAYDQKPQVGMRPSNPPTP  
 SSTPVSPLHHASPNSTHTPKPDRAFPAPHLPPSQSIPDSSYPMDHRFRRQLSEPCNSFPPLPTMPREGRPM  
 YQRMSEPNIPFPQGFKQYHDPVYEHNMTMVGSAASQSFPPMLIKQEPRDFAYDSEVPSCHSIYMRQE  
 GFLAHPSTRTEGCMFEKGRQFYDDTCVVPEKFDGDIKQEPGMYREGPTYQRRGSLQLWQFLVALLDDPSN  
 SHFIAWTGRGMEFKLIEPEEVARRWGIQKNRPAMNYDKLSRSLRYYYEKGIMQKVAGERYVYKFCVDCPEA  
 LFSMAFPDNQRPLLKTDMERHINEEDTVPLSHFDESMAYMPEGGCCNPHPYNEGYVY

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6004\\_e09.zip](https://cdn.origene.com/chromatograms/mk6004_e09.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_004956

**ORF Size:** 1431 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\\_004956.5](#)

**RefSeq Size:** 6824 bp

**RefSeq ORF:** 1434 bp

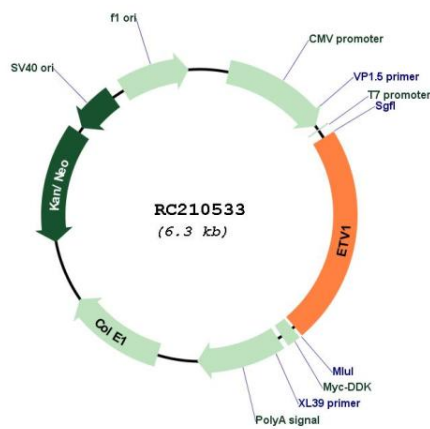
**Locus ID:** 2115

**UniProt ID:** [P50549](#)

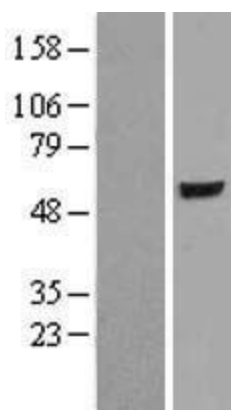
**Cytogenetics:** 7p21.2

<b>Domains:</b>	ETS, ETS_PEA3_N
<b>Protein Families:</b>	ES Cell Differentiation/IPS, Transcription Factors
<b>MW:</b>	55.1 kDa
<b>Gene Summary:</b>	<p>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]</p>

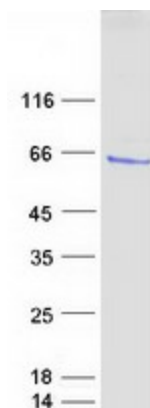
**Product images:**



Circular map for RC210533



Western blot validation of overexpression lysate (Cat# [LY401540]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210533 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ETV1 protein (Cat# [TP310533]). The protein was produced from HEK293T cells transfected with ETV1 cDNA clone (Cat# RC210533) using MegaTran 2.0 (Cat# [TT210002]).