

Product datasheet for **RG228376**

ER81 (ETV1) (NM_001163149) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	ER81
Synonyms:	ER81
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG228376 representing NM_001163149
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGATGGATTTTATGACCAGCAAGTGCCTTACATGGTCACCAATAGTCAGCGTGGGAGAAATTGTAACG
 AGAAACCAACAAATGTCAGGAAAAGAAAATTCATTAAACAGAGATCTGGCTCATGATTGAGAAGAACTCTT
 TCAAGATCTAAGTCAATTACAGGAAACATGGCTTGCAAGTGGCTTTTCATGGCCTGCCACTGAAAATC
 AAGAAAGAACCCACAGTCCATGTTTCAAGAAATCAGCTCTGCCTGCAGTCAAGAACAGCCCTTTAAATTCA
 GCTATGGAGAAAAGTGCCTGTACAATGTCAGTGCCTATGATCAGAAGCCACAAGTGGGAATGAGGCCCTC
 CAACCCCCCACACCATCCAGCACGCCAGTGTCCCACTGCATCATGCATCTCCAACTCAACTCATACA
 CCGAAACCTGACCGGGCTTCCAGCTCACCTCCCTCCATCGCAGTCCATACCAGATAGCAGCTACCCCA
 TGGACCACAGATTTGCGCGCCAGCTTTCTGAACCTGTAACCTCTTCTCCTTTGCCGACGATGCCAAG
 GGAAGGACGTCCTATGTACCAACGCCAGATGTCTGAGCCAAACATCCCCTTCCACCACAAGGCTTTAAG
 CAGGAGTACCACGACCCAGTGTATGAACACAACACCATGGTTGGCAGTGCAGGCCAGCCAAAGCTTTCCCC
 CTCCTCTGATGATTAACAGGAACCCAGAGATTTTGCATATGACTCAGAAGTGCCTAGCTGCCACTCCAT
 TTATATGAGGCAAGAAGGCTTCTGGCTCATCCAGCAGAACAGAGGCTGTATGTTTGAAGGAGGCCCC
 AGGCAGTTTTATGATGACACCTGTGTTGTCCAGAAAAATTCGATGGAGACATCAACAAGAGCCAGGAA
 TGTATCGGGAAGGACCCACATACCAACGGCGAGGATCACTTCAAGCTCTGGCAGTTTTTGGTAGCTCTTCT
 GGATGACCTTCAAATTCTATTTTATTGCTGGACTGGTTCGAGGCATGGAATTTAACTGATTGAGCCT
 GAAGAGGTGGCCGACGTTGGGGCATTAGAAAAACAGGCCAGCTATGAATATGATAAACTTAGCCGTT
 CACTCCGCTATTACTATGAGAAAGGAATTATGAAAAGGTGGCTGGAGAGAGATATGTCTACAAGTTTGT
 GTGTGATCCAGAAGCCCTTTTCTCCATGGCCTTCCAGATAATCAGCGTCCACTGCTGAAGACAGACATG
 GAACGTCAATCAACGAGGAGGACACAGTGCCTTTTCTCACTTTGATGAGAGCATGGCCTACATGCCGG
 AAGGGGGCTGCTGCAACCCCCACCCCTACAACGAAGGCTACGTGTAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG228376 representing NM_001163149
 Red=Cloning site Green=Tags(s)

MDGFYDQVPYMTNSQRGRNCNEKPTNVRKRKFINRDLAHDSEELFQDLSQLQETWLAEVAFHGLPLKI
 KKEPHSPCSEISSACSQEQPFKFSYGEKCLYNVSAYDQKPQVGMRPSNPPTPSSTPVSPHASPNSHT
 PKPDRAFPAPLPPSQSIPDSSYPMDHRFRRLSEPCNSFPPLPTMPREGRPYQRMSEPNIFFPPQGFK
 QEYHDPVYEHNTMVGSAASQSFPPPLMIKQEPDRFAYDSEVPSCHSIYMRQEGFLAHPSTRTEGCMFEKGP
 RQFYDDTCTVPEKFDGDIKQEPGMYREGPTYQRRGSLQLWQFLVALLDDPSNSHFIAWTGRGMEFKLIEP
 EEVARRWGIQKNRPAMNYDKLSRSLRYEYKGMQKVAGERYVYKFCVCDPEALFMAFPDNRPLPKTDM
 ERHINEEDTVPLSHFDESMAYMEGGCCNPHPYNEGYVY

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001163149

ORF Size: 1377 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001163149.1](#), [NP_001156621.1](#)

RefSeq Size: 6237 bp

RefSeq ORF: 1380 bp

Locus ID: 2115

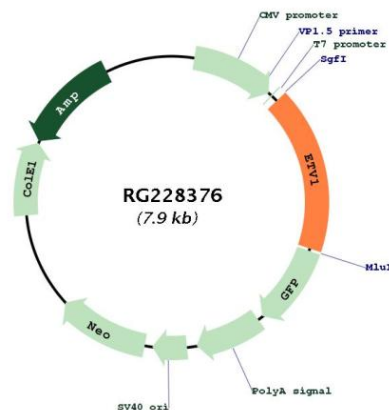
UniProt ID: [P50549](#)

Cytogenetics: 7p21.2

Protein Families: ES Cell Differentiation/IPS, Transcription Factors

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 RG228376