

## Product datasheet for **RG221770**

### **EVI1 (MECOM) (NM\_005241) Human Tagged ORF Clone**

#### Product data:

|                           |                                                                             |
|---------------------------|-----------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                         |
| Product Name:             | EVI1 (MECOM) (NM_005241) Human Tagged ORF Clone                             |
| Tag:                      | TurboGFP                                                                    |
| Symbol:                   | EVI1                                                                        |
| Synonyms:                 | AML1-EVI-1; EVI1; KMT8E; MDS1; MDS1-EVI1; PRDM3; RUSAT2                     |
| Mammalian Cell Selection: | Neomycin                                                                    |
| Vector:                   | pCMV6-AC-GFP (PS100010)                                                     |
| E. coli Selection:        | Ampicillin (100 ug/mL)                                                      |
| ORF Nucleotide Sequence:  | >RG221770 representing NM_005241.<br>Blue=ORF Red=Cloning site Green=Tag(s) |

GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCTG  
 GATCCGGTACCGAGGAGATCTGCCGCC**CGGATCGCC**  
 ATGAAGAGCGAAGACTATCCCCATGAACTATGGCGCCGGATATCCACGAAGAACGGCAATATCGCTGC  
 GAAGACTGTGACCAGCTCTTTGAATCTAAGGCTGAACTAGCAGATCACCAAAAGTTTCCATGCAGTACT  
 CCTCACTCAGCATTTCATGTTGAAGAGGACTTTCAGCAAAACTCGAAAGCGAGAATGATCTCCAA  
 GAGATACACAGATCCAGGAGTGAAGGAATGTGACCAAGTTTTCTGATTTGCAAAGCCTGGAGAAA  
 CACATGCTGTACATACTGAAGAGAGGAATACAAGTGTGATCAGTGTCCCAAGGCATTTAACTGGAAG  
 TCCAATTTAATTCGCCACCAGATGTACATGACAGTGGAAAGCACTATGAATGTGAAAACGTGCCAAG  
 GTTTTCACGGACCCTAGCAACCTTCAGCGGCACATTTCGCTCTCAGCATGTCCGGTGCCTGGGCCCATGCA  
 TGCCCCGGAGTGTGGCAAAACGTTTGCCACTTCGTCCGGCCTCAAACAACAAGCACATCCACAGCAGT  
 GTGAAGCCCTTTATCTGTGAGGTCTGCCATAAATCCTATACTCAGTTTTCAAACCTTTGCCGTCTAAG  
 CGCATGCATGCTGATTGCAGAACCCAAATCAAGTGCAAAGACTGTGGACAAATGTTTCAGCACTACGTCT  
 TCCTTAAATAAACACAGGAGGTTTTGTGAGGGCAAGAACCATTTTGCAGCAGGTGGATTTTTGGCCAA  
 GGCATTTCACTTCCTGGAACCCAGCTATGGATAAAACGTCCATGGTTAATATGAGTCATGCCAACCCG  
 GGCCTTGCTGACTATTTTGGCGCCAATAGGCATCCTGCTGGTCTTACCTTTCCAACAGCTCCTGGATTT  
 TCTTTAGCTTCCCTGGTCTGTTTCTTCCGGCTTGTAACACAGGCCTCCTTTGATACCTGCTAGTTCT  
 CCTGTTAAAGGACTATCAAGTACTGAACAGACAAACAAAGTCAAAGTCCCTCATGACACATCCTCAG  
 ATACTGCCAGCTACACAGGATATTTTGAAGGCACTATCTAAACACCCATCTGTAGGGGACAATAAGCCA  
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 AGTGACCTTGATGATGTGACAGTACCAAGTGGCAGTGACCTGGAAACAACCTCGGGCTCTGATCTGGAA  
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 CTTCAGAACTGGCTTCAATAAATAAAGAAAGAAATACAGCAATCATTCCATTTTCTCACCATCTTTA  
 GAGGAGCAGACTGCGGTGTCAGGAGCTGTGAATGATTCTATAAAGGCTATTGCTTCTATTGCTGAAAAA  
 TACTTTGGTTCAACAGGACTGGTGGGGCTGCAAGACAAAAAGTTGGAGCTTTACCTTACCCTTCCATG


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TTTCCCTCCCATTTTTTCCAGCATTCTCTCAATCAATGTACCCATTTCTGATAGAGACTTGAGATCG  
TTACCTTTGAAAAATGGAACCCCAATCACCAGGTGAAGTAAAGAACTGCAGAAGGGCAGCTCTGAGTCC  
CCCTTTGATCTCACCCTAAGCGAAAGGATGAGAAGCCCTTGACTCCAGTCCCCTCCAAGCCTCCAGTG  
ACACCTGCCACAAGCCAAGACCAGCCCTGGATCTAAGTATGGGCAGTAGGAGTAGAGCCAGTGGGACA  
AAGCTGACTGAGCCTCGAAAAAACACGTGTTTGGGGAAAAAAGGAAGCAACGTGCAATCAAGACCT  
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TTTCAACCACAATTCCAAGTGCCTGATCAGAGAACTTGGATGTCAGCTATTGAAAACATGGCAGAAAAG  
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TACTGTGGCAAGATTTTTCCAAGGTCTGCAACCTAACACGGCACTTGAGAACCACACAGGAGAGCAG  
CCTTACAGATGCAAACTGTGACAGATCATTTAGCATATCTTCTAAGTGCAGGAGCATGTTGCAAC  
ATCCACAATAAGAGAAGCCATTTAAGTGTCACTTATGTGATAGGTGTTTGGTCAACAAACCAATTTA  
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CCAGTGAGGTATAAGAGGAAGAATATAAAGTGGACTTTCTGCTCTAGATCATATAAGGCATTCACA  
GATAGCCTCAAAATGAGGAAATGGAAGATAATCAATATTCTGAAGCTGAGCTGTCTTTTAGTACT  
TCCCATGTGCCAGAGGAACCTAAGCAGCCGTTACACAGAAAGTCCAAATCGCAGGCATATGCTATGATG  
CTGTCACTGTCTGACAAGGAGTCCCTCCATTCTACATCCACAGTCTTCCAACGTGTGGCAGATATG  
GCCAGGGCTGCGCGGAATCCAGTGCTATCCAGTCCATAAGCCACGTA  
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC

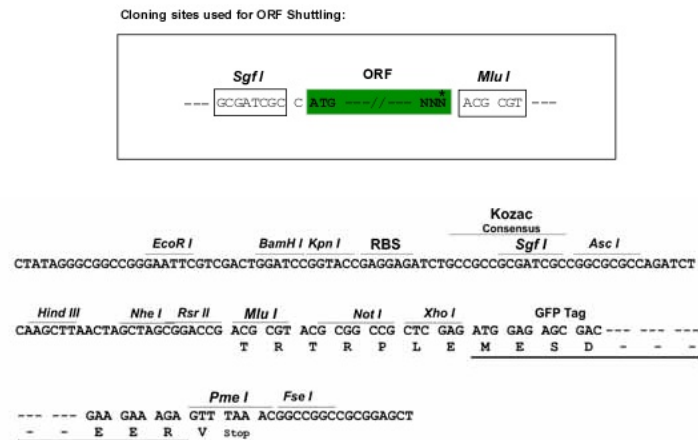
Protein Sequence:

>Peptide sequence encoded by RG221770  
Blue=ORF Red=Cloning site Green=Tag(s)

MKSEDYPHETMAPDIHEERQYRCEDCDQLFESKAELADHQKFPCTSPHSFSAFMSVEEDFQQKLESENDLQ  
EIHTIQECKEDQVFPDLQSLKHLMSHTEEREYKCDQCPKAFNWKSNLIRHQMSHDSGKHYESCENCAK  
VFTDPSNLQRHRSQHVGAHACPECGKTFATSSGLKQKHIIHSSVKPFICEVCHKSYTQFNLCRHK  
RMHADCRQIKCKDCGQMFSTTSSLNKHRRFCEGKNHFAAGGFFGQGISLPGTPAMDKTSMVNMSHANP  
GLADYFGANRHPAGLTFPTAPGFSFSPGLFSPGLYHRPPLIPASSPVKGLSSTEQTNKSQSPLMTHPQ  
ILPATQDILKALSKHPSVGDNKPVELQPERSSSEERPFKISDQSESSDLDDVSTPSGSDLETTSGSDLE  
SDIESDKEKFKENGKMFKDKVSPLQNLASINNKEYSNHSIFSPSLEEQTAVSGAVNDSIKAIASIAEK  
YFGSTGLVGLQDKKVGALPYPSMFPLPFFPAFSQSMYPFPDRDLRSLPLKMEPQSPGEVKKLQKGSSES  
PFDLTTKRKDEKPLTPVPSKPPVTPATSDQDPLDLMSGRSRASGTLTEPRKNHVFGGKGSNVESRP  
ASDGLSLQHARPTFFMDPIYRVEKRKLTDPLEALKEKYLRSPGFLFHPQFQLPDQRTWMSAIENMAEK  
LESFSALKPEASELLQSVPSMFNFRAPPNALPENLLRKGKERYTCRYCGKIFPRSANLTRHLRTHTGEQ  
PYRCKYCDRSFSISSNLQRHVRNIHNKEKPFKCHLCDRCFQQTNLDRHLKKHENGNMGTATSSPHSE  
LESTGAILDDKEDAYFTEIRNFIGNSNHGSQSPRNVEERMNGSHFKDEKALVTSQNSDLLDDEEVEDEV  
LLDEEDEDNDITGKTGKEPVTNLHEGNPEDDYETS SALEMSCKTSPVRYKEEYKSGLSALDHIRHFT  
DSLKMRKMEDNQYSEAEISSFSTSHVPEELKQPLHRKSKSQAYAMMLSLSDKESLHSTSHSSSNVWHSM  
AAAAESSAIQISHV  
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVFSYRYEAGRVIGDFKVMGTGFPEP  
SVIFTDKIIRSNTAVEHLHPMGDNDLDGSFTRTSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites:

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_005241

**ORF Size:** 3105 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.

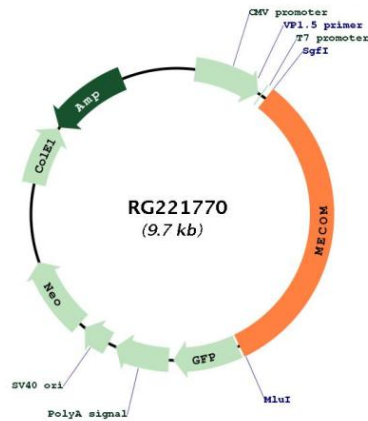
**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_005241.4](#)

**RefSeq Size:** 3570 bp

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RefSeq ORF:       | 3156 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Locus ID:         | 2122                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| UniProt ID:       | <a href="#">Q13465</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Cytogenetics:     | 3q26.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Protein Families: | Druggable Genome, Transcription Factors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Protein Pathways: | Chronic myeloid leukemia, MAPK signaling pathway, Pathways in cancer                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| MW:               | 118.3 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Gene Summary:     | The protein encoded by this gene is a transcriptional regulator and oncoprotein that may be involved in hematopoiesis, apoptosis, development, and cell differentiation and proliferation. The encoded protein can interact with CTBP1, SMAD3, CREBBP, KAT2B, MAPK8, and MAPK9. This gene can undergo translocation with the AML1 gene, resulting in overexpression of this gene and the onset of leukemia. Several transcript variants encoding a few different isoforms have been found for this gene. [provided by RefSeq, Mar 2011] |

### Product images:



Circular map for RG221770