

## Product datasheet for **RC240110**

### EMSY (NM\_001300944) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EMSY (NM_001300944) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EMSY
Synonyms:	C11orf30; GL002
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC240110 representing NM_001300944 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGTGTGGCCAACCCCTCTGGATCTCAGCAGGGATGAATGCAAAGAATTCTTCGAAAATTGG  
AATTGGAGGCATATGCTGGAGTTATCAGTGCACCTCGGGCACAGGGGGATCTACCAAGGAAAAGAAAGA  
TCTTCTGGAGAACTATCAAAGTCTTAGCATCTCAACAGAACGCCACCGTGTGAAGTTCGGAGAGCA  
GTAACGATGAACGGTTAACAACAATTGCACATAAAATGAATTTATCCTTATATTTGGGTGAAAGACCAA  
GTTACAGTATGTCTGGACCTAATAGCTCTTCAGAAATGGTCCATTGAAGTTCGTCGATTGGTACCAGTAT  
GCCCGGCTCGTCCCAAAACCGCCTTTACTGTAACAGCTAATGCTGTTGCTAATGCAGCTATCCAGCAT  
AATGCATCTCTCCAGTGCCTGCAGAAACAGGAAGCAAGGAAGTAGTGGTTTGCTATTCCTACACAAGTA  
CCACGTCAACCCCAACCTCTACCCCTGTTCCAAGTGGCAGCATAGCAACGGTTAAGTCTCCAAGACCTGC  
CAGTCTCGCTCCAATGTAGTTGCTTGCCAAGTGAAGTACTGTTTATGTCAAAAAGTGAAGCTGTTCA  
GATGAAGATGAAAAACCCAGAAAACGAAGGCGAACAACCTCTCCAGTCTCTCCTGTTGTTCTAAAGG  
AAGTTCCAAAGGCCGTTGTTCCAGTCTCAAAGACGATCACTGTGCCTGTGAGTGGTAGTCCCAAGATGAG  
CAACATCATGCAGAGCATTGCCAACTCCTTACCACCCACATGTCTCCTGTAAAAATAACCTTCACTAAA  
CCATCAACACAGACAACAACAACAACAACAAGGTTATTATAGTCACCACATCACCAAGCTCAACCT  
TCGTGCCCAACATTCTCTCCAAATCCCATAACTATGCAGCAGTCACTAAGCTTGTACCAACGTCAGTCAT  
TGCTTCTACAACCCAGAAGCCACCAGTTGTTATAACTGCTTACAGTCTCTCTGGTCAGTAATAGCAGC  
AGTGGCAGCAGGTTCTACACCATCACCTATTCTAATACAGTGCAGTAACAGCTGTGGTGTCTCTA  
CACCATCTGTGGTCATGTCAACAGTAGCACAAGGTGTATCTACATCAGCAATCAAATGGCATCAACCG  
ACTTCTTCCCCAAAAGCTTAGTGAGTGCCCCAACTCAGATTCTGCACAGTCCCTAAACAACATCAA  
CAGTCTCCTAAGCAGCAGTTATATCAAGTGCAACAGCAGACAGCAACAAGTGGCCAGCCTTCTCCAG  
TATCTCATCAGCAACAGCCTCAGCAGTCTCTTTGCCACCTGGTATTAACCTACCATCCAAATCAAACA  
GGAGTCAGGTGTTAAAATCATCACACAACAGGTTCAACCAAGTAAAATCTTACCCAAACAGTGACAGCA  
ACTCTACCACAGTAGCAATCCCTATTATGGTGGTTAGCAGTAATGGTGCAATTATGACAACTAAAC



[View online >](#)

TGGTAACCACTCCTACTGGCACACAAGCAACCTATACCCGGCCAACAGTGAGCCCATCCATTGGTCGGAT  
GGCTGCAACCCCTGGAGCTGCAACCTATGTGAAAACACGAGTGGTAGCATCATTACAGTAGTACCCAAA  
TCATTAGCTACCTTGGGGGGCAAGATAATTAGCAGTAATATAGTTTCTGGAACGACTACCAAAATCACTA  
CAATCCCAATGACTTCCAAGCCCAACGTGATTGTTGTACAAAAGACTACAGGAAAAGGAACGACCATTCA  
AGGCCTCCCGGGCAAAAATGTTGTCACAACGTTGCTAAATGCTGGAGGAGAAAAGACTATTAGACAGTG  
CCAACAGGAGCAAAGCCAGCTATCCTTACTGCTACAAGACCCATACCAAAATGATTGTAACGCAGCCAA  
AAGGAATAGGTTCTACAGTTCAACCAGCAGCTAAAATCATCCCAACAAAATTGTTTATGGGCAGCAAG  
GAAAACGCAGGTTCTTATTAACCCAAAACAGTGACTTTTCAAGCGACAGTTGTTAGTGAACAAACAAGA  
CAGCTAGTAACAGAAACATTACAGCAAGCATCCAGGGTAGCAGAGGCTGGTAATTCATCTATTACAGGAAG  
GAAAAGAAGAACCACAGAATTATACAGATAGTAGTTTCTCTTCTACAGAGTCTCCAGAGTTCCCAAGA  
TTCCAGCCTGTAGTTCATGTAATTGCTTCCCGCGTCAGGATTGGTCAGAACATGAGATTGCAATGGAG  
ACTAGCCCTACCATAATTTATCAGGATGTATCCAGTGAATCACAATCAGCTACTTCAACAATCAAAGCTC  
TGTTAGAACTCCAACAGACAACAGTAAAGGAAAATTGGAATCTAAACCAAGACAACCCACTATTGACCT  
GAGTCAAATGGCAGTGCCTATTCAGATGACCCAGGAAAAGAGACATTCTCCTGAGAGTCCATCAATTGCT  
GTGGTAGAGTCAGAACTAGTAGTGAATACATCACTACTGTCAGCCATCGCTCCAGCCCAACAGCCTT  
CCCAGCCCAGCGGACCCCTGCTCCAGCATGTGGCTCAGTCACAGACCCGAACACAGACTTCGGTGGTGGT  
GAAGTCCATCCCAGCATTTCCCTGGAGCAATCACCCACATTATGCAGCAGGCATTAAGCAGTCACACT  
GCTTTTACAAAACACAGCGAGGAACCTTGGAACTGAGGAGGGCGAGGTTGAAGAGATGGACACTTTAGACC  
CTCAGACAGGCTGTTTTACCGATCTGCCTGACTCAGTCACAGTCAGCTAAACAGCAGAAAACCTTAGCCA  
GCCCCCGTGGAACAGACTCAGCTGCAAGTAAAACTCTGCAAGTCTCCAGACTAAACAGAAAGCAGACC  
ATCCACCTGCAGGCAGACCAGCTCCAGCACAACCTCCCGCAAATGCCAGCTTTCCATCAGGCATCAA  
AACTCACCCCTCTCCAGCAAGAACAAGCACAGCCCAAGCCAGATGTACAGCACACACAGCATCCCATGGT  
GGCCAAAGACAGGCAGCTTCTACCTTAATGGCACAGCCCCGCAAACCTGTAGTACAGGTCCTTGCAGTG  
AAAACCCAGCAGCAGCTCCCTAAACTGCAGCAGGCTCCGAACCAACAAAATCTACGTGCAACCCAAA  
CCCCCAGAGCCAAATGTCGCTCCAGCTTCTCAGAGAAAACAGACGGCAAGCCAGGTGGAGCAGCCAAT  
TATAACCCAAAGGATCCTCTGTTACAAAGATAACTTTTGAGGGGCGCCAGCCTCCCACAGTTACAAAGATA  
ACTGGTGGCAGTCTGTGCCTAAGCTGACATCACCAGTTACAAGCATATCTCCATTACAGCCTCTGAGA  
AGACAGCAGTGTCTGACATTTTGAAAATGTCTTTGATGGAAGCTCAGATTGATACAAATGTAGAACATAT  
GATAGTGGATCCCCAAAGAAGGCTCTTGCCACTAGCATGCTCACTGGTGAAGCAGGATCATTACCCTCC  
ACCCACATGGTGGTGGCAGGGATGGCGAATTCCTCCAGCAACAGAAATGTAGAGAGTCTGTTCGA  
GTCCATCCACTGTTGGCTCTTCCCTAACGACAAGGAAAATTGATCCACCAGCAGTGCCTGCGACAGGCCA  
GTTTCATGCGTATTCAGAAATGTAGGCCAAAAGAAAGCTGAAGAGAGTCCAGCAGAAATATCATCCAGGCT  
ATTCTCAGTATGCTATTCTTGTCACTCCAGCTCCAATGTGGTGGTGGAGCCAGTGGGCTTCTTGAGC  
TAAACAACTTCACTAGTCAACAGCTGGATGATGAGGAGACAGCAATGGAGCAGGACATAGACAGTAGCAC  
GGAGGATGGAACGAACCCAGCCCTTCTCAGAGCTCTGCTGAACGGTCC

ACGCGTACGCGGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC240110 representing NM\_001300944  
 Red=Cloning site Green=Tags(s)

MPVVWPTLLDLRDECKRILRKLELEAYAGVISALRAQGLTKEKKDLLGELSKVLSISTERHRAEVRRA  
 VNDERLTTIAHKMNL SL YLGERPSYSMSGPNSSSEWSIEGRRLVPLMPRLVPQTAFVTANAVANAAIQH  
 NASLPVPAETGSKEVVVCSYTTSTPTSTPVPSGSIATVKSPRPASPANVVVLPSTVYVVKSVSCS  
 DEDEKPRKRRRTNSSSSSPVVLKEVPKAVVPVSKTITVPVSGSPKMSNIMQSIANSLPPHMSPVKITFTK  
 PSTQTNTTTQKVIIVTTSPSSTFVPNILSKSHNYAAVTKLVPTSVIASTTQKPPVVITASQSSLVSNSS  
 SGSSSSTPSPIPNTVAVTAVVSSTPSVMSTVAQGVSTSAIKMASTRLPSPKSLVSAPTQILAQFPKQHQ  
 QSPKQQLYVQVQQTQQQVAQPSPVSHQQPQQSPLPPGIKPTIQIKQESGVKIIITQVQPSKILPKPVTA  
 TLPTSSNSPIMVSSNGAIMTTKLVTPTGTQATYTRPTVSPSIGRMAATPGAATYVKTSGSIIITVVPK  
 SLATLGGKIISSNIVSGTTTKITIPMTSKPNVIVVQKTTGKGTTIQGLPGKNVVTLLNAGGEKTIQTV  
 PTGAKPAILTATRPITKMIVTQPKGIGSTVQPAAKIIPTKIVYGGQKGTQVLKPKPVTFQATVSEQTR  
 QLVTTETLQQASRVAEAGNSSIQEGKEEPQNYTDSSSSSTESSQSSQDSQPVVHVIAARRQDWEHEIAME  
 TSPTIIYQDVSSSESQATSTIKALLELQTTVKEKLESKPRQPTIDLQMAVPIQMTQEKRHSPESPSIA  
 VVESELVAEYITTVSHRSQPQQPSQPQRTLLQHVAQSQTATQTSVVVKSIPASSPGAITHIMQQALSST  
 AFTKHSEELGTEEGEVEEMDTLDPQTGLFYRSALTQSQSAKQKLSQPPLQEQTLQVKTLCFQTKQKT  
 IHLQADQLQHKLQMPQLSIRHQKLTPLQEQQAQPKPDVQHTQHPMAKDRQLPTLMAQPPQTVVQVLAV  
 KTTQQLPKLQAPNQPKIYVQPQTPQSQMSLPASSEKQTASQVEQPIITQGSSVTKITFEGRQPPTVKI  
 TGGSSVPKLTSPVTSISPIQASEKTAVSDILKMSLMEAQIDTNVEHMIVDPPKALATSMLTGEAGSLPS  
 THMVVAGMANSTPQQKCRESCSSPSTVGSSLTRKIDPPAVPATGQFMRIQNVGQKKAEESPAIIIIQA  
 IPQYAI PCHSSSNVVVEPSGLLELNNFTSQQLDDEETAMEQDIDSSTEDGTEPSPSQSSAERS

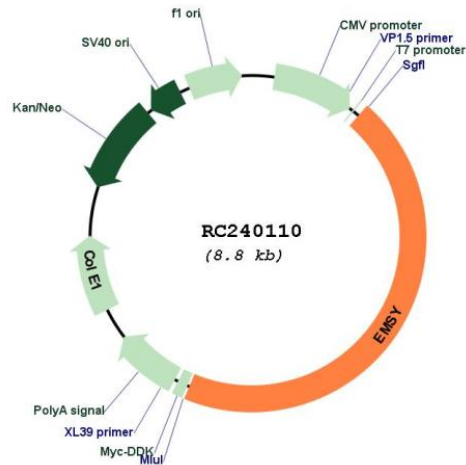
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_001300944

**ORF Size:** 3969 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\\_001300944.2](#)

**RefSeq Size:** 6874 bp

**RefSeq ORF:** 3972 bp

**Locus ID:** 56946

**UniProt ID:** [Q7Z589](#)

**Cytogenetics:** 11q13.5

**MW:** 142.1 kDa

**Gene Summary:** Regulator which is able to repress transcription, possibly via its interaction with a multiprotein chromatin remodeling complex that modifies the chromatin. Its interaction with BRCA2 suggests that it may play a central role in the DNA repair function of BRCA2. As part of a histone H3-specific methyltransferase complex may mediate ligand-dependent transcriptional activation by nuclear hormone receptors.[UniProtKB/Swiss-Prot Function]