

## Product datasheet for **RG235145**

### ERCC6 (NM\_001277058) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ERCC6 (NM_001277058) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ERCC6
Synonyms:	ARMD5; CKN2; COFS; COFS1; CSB; CSB-PGBD3; POF11; RAD26; UVSS1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG235145 representing NM_001277058 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCAAATGAGGGAATCCCCACTCAAGTCAAACCTCAGGAGCAAGACTGTTTACAGAGTCAACCTGTCA  
GTAATAATGAAGAAATGGCAATCAAGCAAGAAAGTGGTGGTGATGGGGAGGTGGAGGAGTACCTCTCCTT  
TCGTTCTGTGGGTGACGGGCTGTCCACCTCTGCTGTGGGTGCGCATCAGCAGCTCCGAGGAGGGCCA  
GCCCTGCTGCACATCGACCGACATCAGATCCAGGCAGTAGAGCCTAGCGCCAGGCCCTTGAGCTGCAGG  
GTTTGGGTGTGGACGTCTATGACCAGGACGTGCTGGAACAGGGAGTGCTTCAGCAGTGGACAATGCCAT  
CCATGAGGCCAGCCGTGCCTCCCAGCTCGTTGACGTGGAGAAGGAGTATCGGTCCGGTCTGGATGACCTC  
ACGTCACTGTACGACATCCCTAAGGCAAATCAATAAAATTATTGAACAGCTTAGCCCTCAAGCTGCCACCA  
GCAGAGACATCAACAGGAACTAGATTCTGTAACACGACAGAAGTATAATAAGGAACAACAGCTAAAAAA  
GATCACTGCAAAACAAAAGCATCTCCAGGCCATCCTTGGAGGAGCAGAGGTGAAAATTGAACTAGATCAC  
GCCAGTCTGGAGGAGGATGCAGAGCCGGGGCCATCCAGTCTTGGCAGCATGCTCATGCCTGTCCAGGAGA  
CTGCCTGGGAAGAGCTCATCCGCACTGGCCAGATGACACCTTTTGGTACCCAGATCCCTCAGAAACAGGA  
GAAAAAGCCAGAAAAATCATGCTTAATGAAGCATCAGGCTTCGAAAAGTATTTGGCAGATCAAGCAAAA  
CTGTCTTTTGAAGGAAGAAGCAAGTTGTAATAAAAGAGCAGCTAGAAAAGCTCCAGCCCAAGTCACGC  
CTCCAGCCCAAGTGCAAAATAAAAACAAAACCAACAAGAAAGCCAGAGTTCTGTCCAAAAAGAGGAGCG  
TTTGAAAAGCACATCAAGAACTCCAGAAGAGGGCTTTGCAGTTCAGGGGAAAGTGGGATTGCCAAAG  
GCAAGGAGACCTTGGGAGTCAAGATGAGGCCAGAGGCAGAGGGAGACTCTGAGGGTGAAGAGTCTGAGT  
ATTTCCACAGAGGAGGAGGAAGAGGAGGAAGATGACGAGGTGGAGGGGCAGAGGCGGACCTGTCTGG  
AGATGGTACTGACTATGAGCTGAAGCCTCTGCCAAGGGCGGAAACGGCAGAAAGTCCAGTGCAG  
GAGATTGATGACTTTTTCCCAAGTTCTGGGAAGAAGCTGAAGCTGCTTCTGTAGGAGAAGGAGGAG  
GAGGAGGTGGAAAGTGGGAAGTACCGAGATGATGGAGATGAAGATTATTATAAGCAGCGGTTAAGTCC  
CAAGATGCCTCGAACACTAAGTTTACATGAAATAACTGACCTTTAGAGACAGATGACAGCATAGAAGCA



[View online »](#)

```

AGTGCTATAGTGATACAACCACCTGAAAATGCTACAGCACCTGTTTCTGATGAGGAATCAGGAGATGAAG
AAGGTGGAACAATAAATAATCTGCCAGGTTCTTTGTTGCACACAGCTGCGTATCTTATTCAAGATGGCTC
TGATGCTGAGTCTGACTCAGATGATCCCTCATACGCACCTAAAGATGACTCTCCTGATGAAGTTCATCT
ACGTTTACTGTGCAGCAACCTCCACCATCAAGGAGGAGGAAAAATGACAAAAATCTTTGCAAATGGAAAA
AAGCCGACCTAACTGTACAACCCGTAGCAGGTAGAGTTACAGCACCACCAACGATTTCTCACCCTAAT
GAGAACTCCCACAGAAATCTTGAACTTTTCTTGATGACGAGGTCAATGAACTCAATGTCAAGTACTCC
AACTTATATGCTTGCAGTAAAGGTGTACATCTTGGCTTGACTAGCTCTGAATTCAAATGTTTTCTGGGAA
TTATTTTTCTGAGTGTTATGTCTCAGTTCCTAGAAGGCGTATGTTTTGGGAACAAAGAACAGATGTGCA
TAATGACTGGTTAGTGCTGCCATGAGACGTGACCGGTTTGAACATATTTTTCTAATTTGCATGTTGCT
GACAATGCAAATTTGGATCCAGTGGACAAATTTTCAAATTTGCGACCTCTCATAAGCAAACCTAATGAGA
GATGCATGAAATTTGTTCCAAATGAAACATATTTACAGTCTTGTGAATTCATGGTTCCTTATTTGGTGC
TCACGGGTGCAAACAATTTATTCGGGGAAAGCCATTTCGGTTTGGCTATAAGTTTTGGTGTGGTCCACC
TGCTGGGCTACATTTGCTGGTTTCAGCCGTATCAGGGTAAAAACCCAAATACTAAACATGAGGAATATG
GTGTCGGTGCCTACTTGTCTTACGTTTGTAGTGGCCTTACAGAGGCACACCCTGGACAATACCATT
TGTATTCAATAACTTTTTACCAGTATTGCACTTCTTGATAAGCTCAGTTCATGGGACATCAGGCAACA
GGTACAGTGAGAAAGGATCACATTGACAGAGTTCCTGGAATCAGATGTAGCTTAAAGAAAAAGAAA
GAGGCACATTTGATTATCGAATTGATGGCAAAGGCAATATTGTCTGCAGATGGAATGATAACAGTGTGT
CACTGTTGCCTCATCTGGTGTGGTATCCATCCCTGTGTCTTGTGAGTCTACTCCAGAAACTGAAA
AAGAAGATACAAGTTCAGCAGCCAAACATGATCAAAGTGTATAACCAGTTCATGGGAGGCGTAGACAGAG
CTGATGAAACATTGATAAGTATCGGGCATCAATCCGTGGAAAGAAATGGTATTCAAGCCCTTTTTGTT
CTGTTTCGAACTGGTCTTACAAAATGCTTGGCAATTGCATAAAACATATGATGAGAAACAGTGGATTTT
CTGGAGTTTCGTGACGTGTGGTATGCCATTACTGGAGACCCATGGTTCATCCTCCAGAACCTGGCCAAA
AAGGAAGACCTCAGAAGCGTAACATTGACTCACGTTATGATGGCATAAATCATGTGATAGTCAAACAGGG
AAAGCAAACGCGATGCGCTGAATGTCATAAGAACAACAACCTTTTCGATGTGAAAAATGTGATGTTGCCTTA
CATGTGAAGTGTCCGTTGAATATCACACTGAA
    
```

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG235145 representing NM\_001277058

Red=Cloning site Green=Tags(s)

```

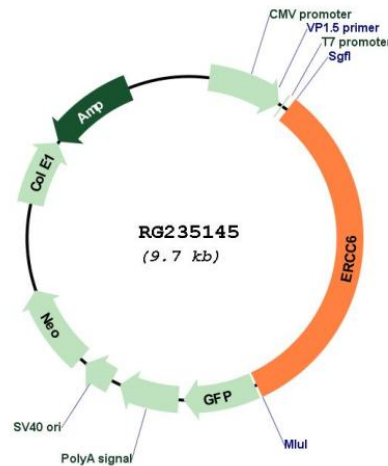
MPNEGIPHSSQTQEQDCLQSQPVSNNNEEAIKQESGGDGEVEEYLSFRSVGDGLSTSAVGCASAAPRRGP
ALLHIDRHQIQAVEPSAQALELQGLGVDVYDQDVLEQGVLLQQVDNAIHEASRASQLVDVEKEYRSVLDL
TSCTTSLRQINKIEQLSPQAATSRDINRKLDSVKRQKYNKEQQLKKITAKQKHLQAILGGAEVKIELDH
ASLEEDAEPGSSLGSMMPVQETAWEELIRTQMTPFGTQIPQKQEKPRKIMLNEASGFKEYLADQAK
LSFERKKQGCNKRAARKAPAPVTPPAPVQNKPNKKARVLSKKEERLKKHIKKLQKRALQFQGVGLPK
ARRPWESDMRPEAEGDSEGESEYFPTEEEEEEDEVEGAEADLSGDGTDYELKPLPKGGKRQKVPVQ
EIDDDFFPSSGEEAEASVGEVGGGGRKVGRYRDDGDEYKQRLSPKMPRTLSLHEITDLETDSDIEA
SAIIVIQPPENATAPVSDSEEGEETINNLPGSLLHTAAYLIQDGSDAESDSDPSYAPKDDSPDEVPS
TFTVQQPPSRRRKMTKILCKWKKADLTVQPVAGRVTAPPNDFFTVMRTPTEILELFLDDEVEIELIVKYS
NLYACSKGVHLGLTSSEFKCFLGIIFLSGYVSVPRRRMFWEQRTDVHNVLVSAAMRRDRFETIFSNLHVA
DNANLDPVDFKSKLRPLISKLNRCMKFVPNETYFSFDEFMVPYFGRHGCKQFIRGKPIRFYKFWCGAT
CLGYICWFQPYQGNPNTKHEEYGVGASLVLQFSEALTEAHPGQYHFVFNFFTSIALLDKLSMGGHQT
GTVRKDHIDRVPLESDVALKKKERGTFDYRIDGKGNIVCRWINDNSVTVASSGAGIHPLCLVSRYSQKLL
KKIQVQPNMIKVVYNQFMGGVDRADENIDKYRASIRGKKWYSSPLLFCFELVLQNAWQLHKTYDEKPVDF
LEFRRRRVCHYLETHGHPPEPGQKGRPQKRNIDSRYDGINHVIIVKQKQTRCAECHKNTTFRCEKCDVAL
HVKCSVEYHTE
    
```

TRTRPLE – GFP Tag – V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001277058

**ORF Size:** 3183 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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001277058.2</a>
<b>RefSeq Size:</b>	3590 bp
<b>RefSeq ORF:</b>	3186 bp
<b>Locus ID:</b>	2074
<b>UniProt ID:</b>	<a href="#">P0DP91</a>
<b>Cytogenetics:</b>	10q11.23
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Nucleotide excision repair
<b>Gene Summary:</b>	<p>This gene encodes a DNA-binding protein that is important in transcription-coupled excision repair. The encoded protein has ATP-stimulated ATPase activity, interacts with several transcription and excision repair proteins, and may promote complex formation at DNA repair sites. Mutations in this gene are associated with Cockayne syndrome type B and cerebrooculofacioskeletal syndrome 1. Alternative splicing occurs between a splice site from exon 5 of this gene to the 3' splice site upstream of the open reading frame (ORF) of the adjacent gene, piggyback-derived-3 (GeneID:267004), which activates the alternative polyadenylation site downstream of the piggyback-derived-3 ORF. The resulting transcripts encode a fusion protein that shares sequence with the product of each individual gene. [provided by RefSeq, Mar 2016]</p>