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Product datasheet for SC326839

ERCC1 (NM_001166049) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ERCC1 (NM_001166049) Human Untagged Clone
Tag:	Tag Free
Symbol:	ERCC1
Synonyms:	COFS4; RAD10; UV20
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC326839 representing NM_001166049. Blue=Insert sequence Red=Cloning site Green=Tag(s) GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC ATGGACCCTGGGAAGGACAAAGAGGGGGTGCCCCAGCCCTCAGGGCCGCCAGCAAGGAAGAAATTTGTG ATACCCCTCGACGAGGATGAGGTCCCTCCTGGAGTGGCCAAGCCCTTATTCCGATCTACACAGAGCCTT CCCACTGTGGACACCTCGGCCCAGGCGGCCCCTCAGACCTACGCCGAATATGCCATCTCACAGCCTCTG GAAGGGGCTGGGGCCACGTGCCCCACAGGGTCAGAGCCCCTGGCAGGAGAGACGCCCAACCAGGCCCTG AAACCCGGGGCAAAATCCAACAGCATCATTGTGAGCCCTCGGCAGAGGGGCAATCCCGTACTGAAGTTC GTGCGCAATGTGCCCTGGGAATTTGGCGACGTAATTCCCGACTATGTGCTGGGCCAGAGCACCTGTGCC CTGTTCCTCAGCCTCCGCTACCACAACCTGCACCCAGACTACATCCATGGGCGGCTGCAGAGCCTGGGG AAGAACTTCGCCTTGCGGGTCCTGCTTGTCCAGGTGGATGTGAAAGATCCCCAGCAGGCCCTCAAGGAG CTGGCTAAGATGTGTATCCTGGCCGACTGCACATTGATCCTCGCCTGGAGCCCCGAGGAAGCTGGGCGG TACCTGGAGACCTACAAGGCCTATGAGCAGAAACCAGCGGACCTCCTGATGGAGAAGCTAGAGCAGGAC TTCGTCTCCCGGTCTCTGGAACAGCTCATCGCCGCATCAAGAGAAGATCTGGCCTTATGCCCAGGCCTG GGCCCTCAGAAAGCCCGGAGGCTGTTTGATGTCCTGCACGAGCCCTTCTTGAAAGTACCCTGA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
Restriction Sites:	SgfI-MluI
ACCN:	NM_001166049
Insert Size:	822 bp

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OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_001166049.1
RefSeq Size:	3328 bp
RefSeq ORF:	822 bp
Locus ID:	2067
UniProt ID:	P07992
Cytogenetics:	19q13.32
Protein Families:	Druggable Genome
Protein Pathways:	Nucleotide excision repair
MW:	30 kDa

Gene Summary: The product of this gene functions in the nucleotide excision repair pathway, and is required for the repair of DNA lesions such as those induced by UV light or formed by electrophilic compounds including cisplatin. The encoded protein forms a heterodimer with the XPF endonuclease (also known as ERCC4), and the heterodimeric endonuclease catalyzes the 5' incision in the process of excising the DNA lesion. The heterodimeric endonuclease is also involved in recombinational DNA repair and in the repair of inter-strand crosslinks. Mutations in this gene result in cerebrooculofacioskeletal syndrome, and polymorphisms that alter expression of this gene may play a role in carcinogenesis. Multiple transcript variants encoding different isoforms have been found for this gene. The last exon of this gene overlaps with the CD3e molecule, epsilon associated protein gene on the opposite strand. [provided by RefSeq, Oct 2009]
Transcript Variant: This variant (3) lacks an alternate in-frame exon in the 3' coding region, compared to variant 2. The resulting isoform (3) lacks an internal segment, compared to isoform 2. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.