

Product datasheet for RC208787

ERCC1 (NM_202001) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ERCC1 (NM_202001) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ERCC1
Synonyms:	COFS4; RAD10; UV20
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208787 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACCCTGGGAAGGACAAAGAGGGGGTGCCCCAGCCCTCAGGGCCGCCAGCAAGGAAGAAATTTGTGA
TACCCCTCGACGAGGATGAGGTCCTCCTGGAGTGCCAAGCCCTTATTCCGATCTACACAGAGCCTTCC
CACTGTGGACACCTCGGCCAGGCGGCCCTCAGACCTACGCCGAATATGCCATCTCACAGCCTCTGGAA
GGGGCTGGGGCCACGTGCCCCACAGGGTCAGAGCCCTGGCAGGAGAGACGCCCAACCAGGCCCTGAAAC
CCGGGGCAAAATCCAACAGCATATTGTGAGCCCTCGGCAGAGGGGCAATCCCGTACTGAAGTTCGTGCG
CAACGTGCCCTGGGAATTTGGCGACGTAATCCCGACTATGTGCTGGGCCAGAGCACCTGTGCCCTGTT
CTCAGCCTCCGCTACCACAACCTGCACCCAGACTACATCCATGGGCGGCTGCAGAGCCTGGGAAGAAGT
TCGCTTGCGGGTCTGCTTGTCCAGGTGGATGTGAAAGATCCCCAGCAGGCCCTCAAGGAGCTGGCTAA
GATGTGTATCCTGGCCGACTGCACATTGATCCTCGCCTGGAGCCCGAGGAAGCTGGGCGGTACCTGGAG
ACCTACAAGGCCATGAGCAGAAACCAGCGGACCTCCTGATGGAGAAGCTAGAGCAGGACTTCGTCTCC
GGGTGACTGAATGTCTGACCACCGTGAAGTCAGTCAACAAAACGGACAGTCAGACCCTCTGACCACATT
TGGATCTCTGGAACAGCTCATCGCCGCATCAAGAGAAGATCTGGCCTTATGCCAGGCCCTGGGCCCTCAG
AAAGTAAGAGCTCTGGGAAAGAACCAGGAGTTGGGGGAAGGAGAGAGCCCAATAAACACAACCTGA
GACCCCAAAGTTTTAAGGTGAAAAAGAACCAAGACCAGACACAGTGGCTTCCGCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208787 protein sequence
Red=Cloning site Green=Tags(s)

MDPGKDKEGVPQPSGPPARKKFVIPLDEDEVPPGVAKPLFRSTQSLPTVDTSAQAAPQTYAEYAI SQPLE
 GAGATCPTGSEPLAGETPNQALKPGAKSNSIIVSPRQRGNPVLKFRNVPWEFGDVIPDYVLGQSTCALF
 LSLRYHNLHPDYIHGRLQSLGKNFALRVLLVQVDVKDPQQALKELAKMCILADCTLILAWSPEEAGRYLE
 TYKAYEQKPADLLMEKLEQDFVSRVTECLTTVKSVNKTD SQTLT TTFGSLEQLIAASREDLALCPGLGPQ
 KVRALGKNPRSWGKERAPNKHNL RPQSFKVKKEPKTRHSGFRL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6353_g01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_202001

ORF Size: 969 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_202001.3](#)

RefSeq Size: 1291 bp

RefSeq ORF: 972 bp

Locus ID: 2067

UniProt ID: [P07992](#)

Cytogenetics: 19q13.32

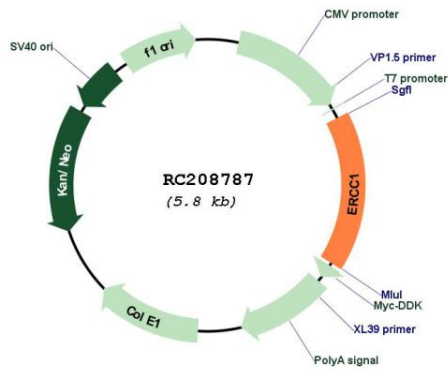
Protein Families: Druggable Genome

Protein Pathways: Nucleotide excision repair

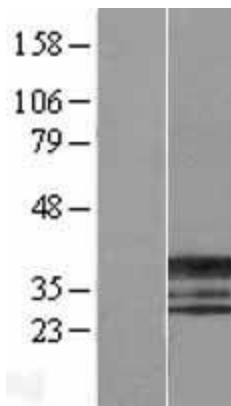
MW: 35.6 kDa

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]

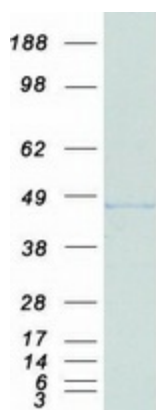
Product images:



Circular map for RC208787



Western blot validation of overexpression lysate (Cat# [LY404356]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208787 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ERCC1 protein (Cat# [TP308787]). The protein was produced from HEK293T cells transfected with ERCC1 cDNA clone (Cat# RC208787) using MegaTran 2.0 (Cat# [TT210002]).