OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC402021

XPD (ERCC2) (NM_000400) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	XPD (ERCC2) (NM_000400) Human Mutant ORF Clone
Mutation Description:	C663R
Affected Codon#:	663
Affected NT#:	1987
Nucleotide Mutation:	ERCC2 Mutant (C663R), Myc-DDK-tagged ORF clone of Homo sapiens excision repair cross-complementing rodent repair deficiency, complementation group 2 (ERCC2), transcript variant 1 as transfection-ready DNA
Effect:	Trihohiodysrophy
Symbol:	ERCC2
Synonyms:	COFS2; EM9; TFIIH; TTD; TTD1; XPD
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_000400
ORF Size:	2280 bp
Restriction Sites:	SgfI-MluI

View online »

ORF Nucleotide Sequence:

>RC402021 representing NM_000400
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGCTCAACGTGGACGGGCTCCTGGTCTACTTCCCGTACGACTACATCTACCCCGAGCAGTTCTCCT
ACATGCGGGAGCTCAAACGCACGCTGGACGCCAAGGGTCATGGAGTCCTGGAGATGCCCTCAGGCACCGG
GAAGACAGTATCCCTGTTGGCCCTGATCATGGCATACCAGAGAGCATATCCGCTGGAGGTGACCAAACTC
ATCTACTGCTCAAGAACTGTGCCAGAGATTGAGAAGGTGATTGAAGAGCTTCGAAAGTTGCTCAACTTCT
ATGAGAAGCAGGAGGGCGAGAAGCTGCCGTTTCTGGGACTGGCTCTGAGCTCCCGCAAAAACTTGTGTAT
TCACCCTGAGGTGACACCCCTGCGCTTTGGGAAGGACGTCGATGGGAAATGCCACAGCCTCACAGCCTCC
TATGTGCGGGCGCAGTACCAGCATGACACCAGCCTGCCCCACTGCCGATTCTATGAGGAATTTGATGCCC
ATGGGCGTGAGGTGCCCCTCCCCGCTGGCATCTACAACCTGGATGACCTGAAGGCCCTGGGGCGGCGCCA
GGGCTGGTGCCCATACTTCCTTGCTCGATACTCAATCCTGCATGCCAATGTGGTGGTTTATAGCTACCAC
TACCTCCTGGACCCCAAGATTGCAGACCTGGTGTCCAAGGAACTGGCCCGCAAGGCCGTCGTGGTCTTCG
ACGAGGCCCACAACATTGACAACGTCTGCATCGACTCCATGAGCGTCAACCTCACCCGCCGGACCCTTGA
CCGGTGCCAGGGCAACCTGGAGACCCTGCAGAAGACGGTGCTCAGGATCAAAGAGACAGACGAGCAGCGC
CTGCGGGACGAGTACCGGCGTCTGGTGGAGGGGCTGCGGGAGGCCAGCGCCGCCCGGGAGACGGACGCCC
ACCTGGCCAACCCCGTGCTGCCCGACGAAGTGCTGCAGGAGGCAGTGCCTGGCTCCATCCGCACGGCCGA
GCATTTCCTGGGCTTCCTGAGGCGGCTGCTGGAGTACGTGAAGTGGCGGCTGCGTGTGCAGCATGTGGTG
CAGGAGAGCCCGCCCGCCTTCCTGAGCGGCCTGGCCCAGCGCGTGTGCATCCAGCGCAAGCCCCTCAGAT
TCTGTGCTGAACGCCTCCGGTCCCTGCTGCATACTCTGGAGATCACCGACCTTGCTGACTTCTCCCCGCT
CACCCTCCTTGCTAACTTTGCCACCCTTGTCAGCACCTACGCCAAAGGCTTCACCATCATCATCGAGCCC
TTTGACGACAGAACCCCGACCATTGCCAACCCCATCCTGCACTTCAGCTGCATGGACGCCTCGCTGGCCA
TCAAACCCGTATTTGAGCGTTTCCAGTCTGTCATCATCACATCTGGGACACTGTCCCCGCTGGACATCTA
CCCCAAGATCCTGGACTTCCACCCCGTCACCATGGCAACCTTCACCATGACGCTGGCACGGGTCTGCCTC
TGCCCTATGATCATCGGCCGTGGCAATGACCAGGTGGCCATCAGCTCCAAATTTGAGACCCGGGAGGATA
TTGCTGTGATCCGGAACTATGGGAACCTCCTGCTGGAGATGTCCGCTGTGGTCCCTGATGGCATCGTGGC
CTTCTTCACCAGCTACCAGTACATGGAGAGCACCGTGGCCTCCTGGTATGAGCAGGGGATCCTTGAGAAC
ATCCAGAGGAACAAGCTGCTCTTTATTGAGACCCAGGATGGTGCCGAAACCAGTGTCGCCCTGGAGAAGT
ACCAGGAGGCCTGCGAGAATGGCCGCGGGGCCATCCTGCTGTCAGTGGCCCGGGGCAAAGTGTCCGAGGG
AATCGACTTTGTGCACCACTACGGGCGGGCCGTCATCATGTTTGGCGTCCCCTACGTCTACACACAGAGC
CGCATTCTCAAGGCGCGGCTGGAATACCTGCGGGACCAGTTCCAGATTCGTGAGAATGACTTTCTTACCT
TCGATGCCATGCGCCACGCGGCCCAGCGTGTGGGTCGGGCCATCAGGGGCAAGACGGACTACGGCCTCAT
GGTCTTTGCCGACAAGCGGTTTGCCCGTGGGGACAAGCGGGGGAAGCTGCCCCGCTGGATCCAGGAGCAC
CTCACAGATGCCAACCTCAACCTGACCGTGGACGAGGGTGTCCAGGTGGCCAAGTACTTCCTGCGGCAGA
TGGCACAGCCCTTCCACCGGGAGGATCAGCTGGGCCTGTCCCTGCTCAGCCTGGAGCAGCTAGAATCAGA
GGAGACGCTGAAGAGGATAGAGCAGATTGCTCAGCAGCTC

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence:

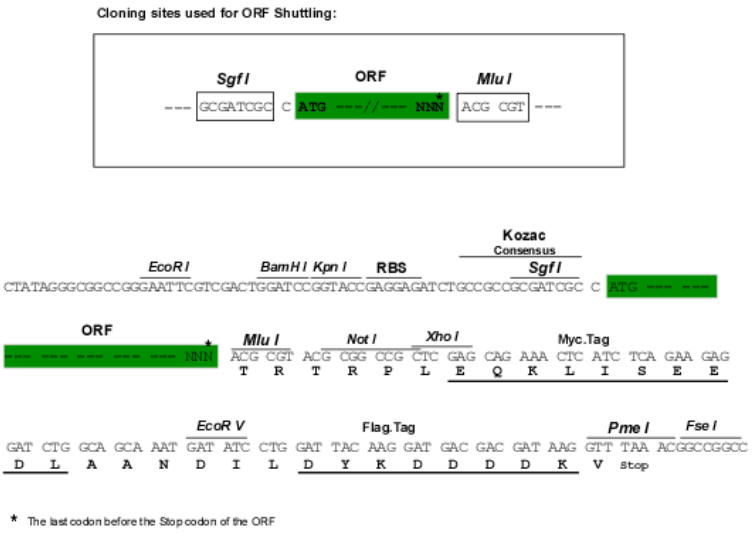
>RC402021 representing NM_000400
Red=Cloning site Green=Tags(s)

MKLNVDGLLVYFPYDYIYPEQFSYMRELKRTLDAKGHGVLEMPSGTGKTVSLLALIMAYQRAYPLEVTKL
IYCSRTVPEIEKVIEELRKLLNFYEKQEGEKLPFLGLALSSRKNLCIHPEVTPLRFGKDVDGKCHSLTAS
YVRAQYQHDTSLPHCRFYEEFDAHGREVPLPAGIYNLDDLKALGRRQGWCPYFLARYSILHANVVVYSYH
YLLDPKIADLVSKELARKAVVVFDEAHNIDNVCIDSMSVNLTRRTLDRCQGNLETLQKTVLRIKETDEQR
LRDEYRRLVEGLREASAARETDAHLANPVLPDEVLQEAVPGSIRTAEHFLGFLRRLLEYVKWRLRVQHVV
QESPPAFLSGLAQRVCIQRKPLRFCAERLRSLLHTLEITDLADFSPLTLLANFATLVSTYAKGFTIIIEP
FDDRTPTIANPILHFSCMDASLAIKPVFERFQSVIITSGTLSPLDIYPKILDFHPVTMATFTMTLARVCL
CPMIIGRGNDQVAISSKFETREDIAVIRNYGNLLLEMSAVVPDGIVAFFTSYQYMESTVASWYEQGILEN
IQRNKLLFIETQDGAETSVALEKYQEACENGRGAILLSVARGKVSEGIDFVHHYGRAVIMFGVPYVYTQS
RILKARLEYLRDQFQIRENDFLTFDAMRHAAQRVGRAIRGKTDYGLMVFADKRFARGDKRGKLPRWIQEH
LTDANLNLTVDEGVQVAKYFLRQMAQPFHREDQLGLSLLSLEQLESEETLKRIEQIAQQL

SGPTRTRRLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



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).
RefSeq:	NP_000391
RefSeq Size:	2280 bp
RefSeq ORF:	2283 bp
Locus ID:	2068
Cytogenetics:	19q13.32
Domains:	DEXDc2, HELICc2
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Nucleotide excision repair
MW:	83.6 kDa
Gene Summary:	The nucleotide excision repair pathway is a mechanism to repair damage to DNA. The protein encoded by this gene is involved in transcription-coupled nucleotide excision repair and is an integral member of the basal transcription factor BTF2/TFIIH complex. The gene product has ATP-dependent DNA helicase activity and belongs to the RAD3/XPD subfamily of helicases. Defects in this gene can result in three different disorders, the cancer-prone syndrome xeroderma pigmentosum complementation group D, trichothiodystrophy, and Cockayne syndrome. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2008]