

Product datasheet for RC225633

XPD (ERCC2) (NM_001130867) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	XPD (ERCC2) (NM_001130867) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	XPD
Synonyms:	COFS2; EM9; TFIIH; TTD; TTD1; XPD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC225633 representing NM_001130867 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGGGAGCTCAAACGCACGCTGGACGCCAAGGGTCATGGAGTCTGGAGATGCCCTCAGGCACCGGGA
AGACAGTATCCCTGTTGGCCCTGATCATGGCATAACCAGAGAGCATATCCGCTGGAGGTGACCAAACCTCAT
CTACTGCTCAAGAACTGTCCAGAGATTGAGAAGGTGATTGAAGAGCTTCGAAAGTTGCTCAACTTCTAT
GAGAAGCAGGAGGGCGAGAAGCTGCCGTTTCTGGGACTGGCTCTGAGCTCCCGAAAAAATTGTGTATTC
ACCCTGAGGTGACACCCCTGCGCTTTGGGAAGGACGTCGATGGGAAATGCCACAGCCTCACAGCCTCCTA
TGTGCGGGCGCAGTACCAGCATGACACCAGCCTGCCACTGCCGATTCTATGAGGAATTTGATGCCCAT
GGGCGTGAGGTGCCCTCCCCGCTGGCATCTACAACCTGGATGACCTGAAGGCCCTGGGGCGGGCCAGG
GCTGGTGCCATACTTCTTGCTCGATACTCAATCCTGCATGCCAATGTGGTGGTTTATAGCTACCACTA
CCTCCTGGACCCAAGATTGCAGACCTGGTGTCCAAGAACTGGCCCGCAAGGCCGTCGTGGTCTTCGCAG
GAGGCCACAACATTGACAACGCTCTGCATCGACTCCATGAGCGTCAACCTCACCCGCCGACCCCTTGACC
GGTGCCAGGGCAACCTGGAGACCCTGCAGAAGACGGTGTCTCAGGATCAAAGAGACAGACGAGCAGCGCT
GCGGGACGAGTACCGCGTCTGGTGGAGGGCTGCGGGAGGCCAGCGCCCGCCGGGAGACGGACGCCAC
CTGGCCAACCCCGTCTGCCGACGAAGTGTGCAGGAGGACGCTGGCTCCATCCGCACGGCCGAGC
ATTTCTGGGCTTCTGAGGCGGCTGCTGGAGTACGTGAAGTGGCGGCTGCGTGTGCAGCATGTGGTGCA
GGAGAGCCCGCCGCTTCTGAGCGGCTGGCCAGCGGCTGTGCATCCAGCGCAAGCCCTCAGATTC
TGTGCTGAACGCCTCCGGTCCCTGCTGCATACTCTGGAGATCACCGACCTTGCTGACTTCTCCCCGCTCA
CCCTCCTTGCTAACTTTGCCACCCTTGTCAGCACCTACGCCAAAGGCCAGGCTCAGCACTGTGGAAGCAG
CAGGAACCAAAAAGATCTCATCCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC225633 representing NM_001130867
Red=Cloning site Green=Tags(s)

MRELKRTLDAKGHVLEMPSGTGKTVSLLALIMAYQRAYPLEVTKLIYCSRTVPEIEKVIEELRKLNNFY
 EKQEGEKLPFLGLALSSRNLCIHPEVTPFRFGKDVDGKCHSLTASYVRAQYQHDTSLPHCRFYEEFDAH
 GREVPLPAGIYNLDDLKALGRRQGWCPYFLARYSILHANVVVYSYHYLLDPKIADLVSKELARKAVVVFD
 EAHNIDNVCIDMSVNLTRRTLDRQCQGNLETLQKTVLRRIKETDEQRLRDEYRRLVEGLREASAARETDAH
 LANPVLPEVLQEAVPGSIRTAEHFLGFLRRLLEYVKWRLRVQHVYQESPPAFLSGLAQRVCIQRKPLRF
 CAERLRSLLHTLEITDLADFSPLTLLANFATLVSTYAKGQAQHCSSRNQKRSH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8034_g03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001130867

ORF Size: 1215 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_001130867.1](#), [NP_001124339.1](#)

RefSeq ORF: 1218 bp

Locus ID: 2068

UniProt ID: [P18074](#)

Cytogenetics: 19q13.32

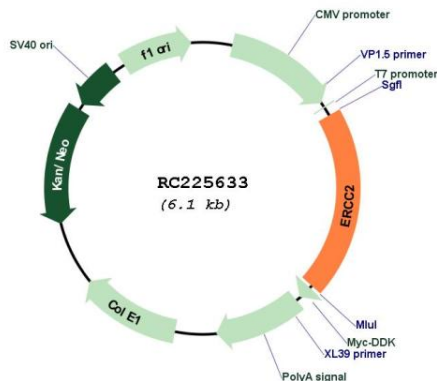
Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: Nucleotide excision repair

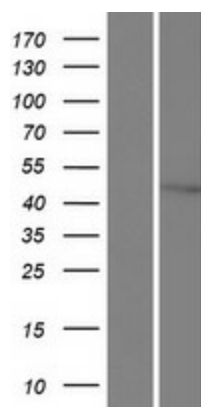
MW: 46.1 kDa

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]

Product images:



Circular map for RC225633



Western blot validation of overexpression lysate (Cat# [LY427299]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225633 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).