

Product datasheet for **RC223300**

XPF (ERCC4) (NM_005236) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	XPF (ERCC4) (NM_005236) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	XPF
Synonyms:	ERCC11; FANCC; RAD1; XFEPS; XPF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC223300 representing NM_005236
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGTCAGGGCAGCCGGCTCGACGGATTGCCATGGCGCCGCTGCTGGAGTACGAGCGACAGCTGGTGC
 TGGAACTGCTCGACACTGACGGGCTAGTAGTGTGCGCCCGGGCTCGGCGCGGACCGGCTCCTCTACCA
 CTTTCTCCAGCTGCACTGCCACCCAGCCTGCCTGGTGCTGGTGTCAACACGCAGCCGGCCGAGGAGGAG
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 GCAACAGTCGCTATGAAGTTTACACACAAGGTGGTGTATATTTGCGACAAGTAGGATACTTGTGGTTGA
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 ACTTCCCAGACTACGGATTCTCTGGTGCCCTCTCCTCATGCAACGGCGGAGTTGTTTGGAGAGCTGAA
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 TCTGGGGAATGCTGCAATGCCAAACAGCTTTATGATTTCACTCACACCTTTTTGCAGAAGTCGTATCA
 AAAGGAAAAGGAAAAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATTAAGGTTTAA

Protein Sequence: >RC223300 representing NM_005236
 Red=Cloning site Green=Tags(s)

MESGQPARRIAMAPLLEYERQLVLELLDLDGLVVCARGLGADRLLYHFLQLHCHPACLVLVLTQPAEEE
 YFINQLKIEGVEHLPRRVITNEITSNSRYEYVTQGGVIFATSRILVDFLDTRIPSDLITGILVYRAHRII
 ESCQEAFILRLFRQKNKRGFIKAFDNAVAFDTGFCHEVERVMRNLFVRKLYLWPRFHVAVNSFLEQHKPE
 VVEIHVSMTPTMLAIQTAILDILNACLKELKCHNPSLEVEDLSLENAIGKPFDKTIRHYLDPLWHQLGAK
 TKSLVQDLKILRLLQYLQYDCVTFLLNLLSLRATEKAFQNSGWLFLDSSTSMFINARARVYHLPDAK
 MSKKEKI SEKMEIKEGEETKKELVLESNPKWEALTEVLKEIEAENKSEALGGPGQVLICASDDRTCSQL
 RDYITLGAEAFLLRLYRKTFEKDSKAEVVMKFRKEDSSKRIRKSHKRPKDPQNKERASTKERTLKKKKR
 KLTLTQMVGKPELEEEGDVEEGYRREISSPESCPPEIKHEEFDVNLSSDAAFGILKEPLTIIHPLLGC
 SDPYALTRVLHEVEPRYVLYDAELTFVRQLEIYRASRPKPLRVYFLIYGGSTEEQRYLTALRKEEAF
 EKLIREKASMVVPEEREGRDETNDLVRGTASADVSTDTRKAGGQEQNGTQQSIVVDMREFRSELP
 SLIHRGIDIEPVTLEVDYILTPEMCVERKISDLIGSLNNGRLYSQCISMSRYKRPVLLIEFDPSKPFSLT
 SRGALFQEISSNDISSKLTLLTLHFPRRLILWCPSPHATAELFEELKQSKPQDAATALAITADSETLPE
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 KKGKKK

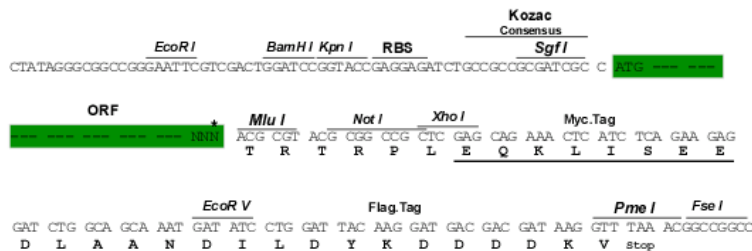
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6164_c08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



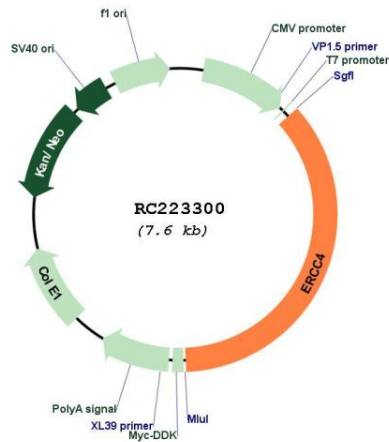
* The last codon before the Stop codon of the ORF

ACCN: NM_005236

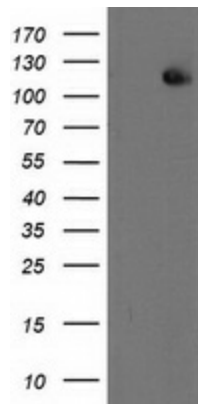
ORF Size: 2748 bp

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:	<ol style="list-style-type: none">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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_005236.3
RefSeq Size:	2751 bp
RefSeq ORF:	2751 bp
Locus ID:	2072
UniProt ID:	Q92889
Cytogenetics:	16p13.12
Protein Families:	Druggable Genome
Protein Pathways:	Nucleotide excision repair
MW:	104.3 kDa
Gene Summary:	The protein encoded by this gene forms a complex with ERCC1 and is involved in the 5' incision made during nucleotide excision repair. This complex is a structure specific DNA repair endonuclease that interacts with EME1. Defects in this gene are a cause of xeroderma pigmentosum complementation group F (XP-F), or xeroderma pigmentosum VI (XP6). [provided by RefSeq, Mar 2009]

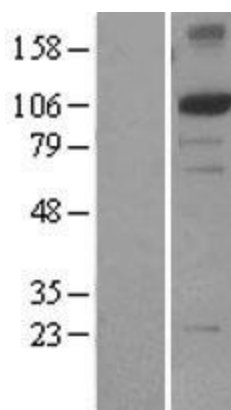
Product images:



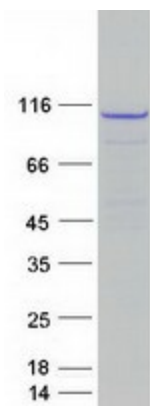
Circular map for RC223300



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ERCC4 (Cat# RC223300, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ERCC4 (Cat# [TA503261]). Positive lysates [LY401605] (100ug) and [LC401605] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401605]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223300 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ERCC4 protein (Cat# [TP323300]). The protein was produced from HEK293T cells transfected with ERCC4 cDNA clone (Cat# RC223300) using MegaTran 2.0 (Cat# [TT210002]).