

Product datasheet for **MC202117**

Ercc3 (NM_133658) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ercc3 (NM_133658) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ercc3
Synonyms:	BTF2 p89; Ercc-3; XPB
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >BC026575 sequence for NM_133658
 GAGGAGGTGGTGC GGTTGCCCGCCTGCCTGCATCTAGAGCTGTTATGGGCAAAAGAGATCGAGTGGACC
 GCGACAAAAGAAATCCAAGAAGAGGCAGTATGAAGAGGAAGAGGAAACGAAAGACGACATTCCTGGGAA
 CGAGTCTCAGGAGGCGGTGCCCTCCGCCCTGGGAAACAGGTGGACGAGTCCAGCACAAAGTGGATGAG
 TATGGAGCAAAGGACTACAGACAGCAGATGCCACTAAAGGGTGACCATACCTCCAGGCCCTCTGGGTGG
 CTCCTGATGGCCACATTTTCTTGAAGCCTTCTCTCCAGTTTACAATATGCCAAAGACTTCCTGGTGGC
 AATTGCAGAGCCGGTGTGCCCGCCTACTCATGTACATGAATACAAGCTAACCCGCTACTCCCTCTATGCA
 GCGGTGAGTGTGGGCTGCAAACCAAGTGACATTACTGAGTACCTCAGAAAGCTCAGTAAGACTGGAGTTC
 CTGATGGAATTATCCAGTTTATTAAGCTGTGCACTGTGAGCTATGGGAAGGTCAAGCTGGTCCCTCAAGCA
 CAACAGGTACTTTGTTGAAAGTCCCACCTGATGTTATCCAGCATCTTCTTCAAGACCCAGTATCCGG
 GAATGTCGCTTGAGGAACGCCGAGGGCCAGGCCACCGAACTCATCACAGAGACTTTTACAAGCAAATCTG
 CTATTTCTAAGACGGCGGCGGAAGGCAGTGGCGGGCCTTCTACTTCGACAGGGGTAGATGCACAGGCCAC
 GTCTGACATACCCAAAGACCTGTTTGTATTTTATGAGCAAATGGACAAGGATGAGGAGGAGGAGGAAGAG
 ACACAGACAGTGTCTTTGAAGTAAAGCAGGAAATGATCGAGGAGCTGCAGAAGCGCTGCATCTGCTTAG
 AGTACCCGCTGCTGGCAGAGTATGACTTCCGGAATGACACTCTCAATCCTGACATCAACATTGACCTGAA
 GCCCACAGCCGTA CTAGACCCTATCAGGAGAAGAGCCTGCGGAAGATGTTTGGGAACGGACGAGCACGC
 TCAGGAGTCATTGTTCTCCCTGTGGTGTGGGAAGTCCCTGGTGGCGTACTGCCGATGCACCTGTCA
 GAAAGCGCTGTCTCGTCTGGGCAACTCGGCTGTGTGTGGAGCAGTGGAAAGCCAGTTTAAAGTGTG
 GTCAACCATCGATGACAGCCAGATCTGCCGCTTACCTCAGATGCCAAGGACAAGCCATCGGCTGCTCC
 GTTGCCATTAGCACTTACTCTATGCTGGGCCACACCACAAAAGTCTGGGAAGCTGAGAGAGTCATGG
 AGTGGCTCAAACCCAGGAGTGGGGCCTCATGATCCTTGACGAGGTGCACACCATTCCAGCCAGGATGTT
 CCGGCGGGTCTGACTATTGTGCAGGCGCACTGAAGCTTGGTTGACTGCAACCCTGTCCGGGAAGAT
 GACAAAATTGTTGACTTAAATTTCTGATTGGGCCCAAGCTCTATGAAGCCAAGTGGATGGAGTGCAGA
 ACAATGGGTACATCGCTAAAGTCCAGTGTGCTGAGGTTTGGTGCCGATGTCTCCGAGTCTACCGAGA
 GTATGTGGCAATCAAACAAAGAAACGGATCCTGTTGTACACCATGAATCCCAACAAATTCAGAGCCTGC
 CAGTTTCTGATCAAGTTTTCATGAAAGGAGGAATGACAAGATTATTGCTTTGCTGACAACGTATTTGCCCT
 TGAAGGAATATGCCATTCGGCTGAACAAACCTTATATCTACGGGCCACGTCACAGGGAGAACGTATGCA
 GATTCTCCAGAACTTCAAGCACAAACCCAAAATCAACACCATCTTCATCTCCAAGTTGGTGACACATCC
 TTTGATCTGCCAGAAGCCAATGCTCTCATTAGATCTCTCCCATGGTGGCTCCCGACGGCAGGAAGCCC
 AGAGACTGGGACGGTACTCAGAGCCAAGAAAGGGATGGTGCAGAGGAATACAATGCCTTTTCTACTC
 CCTGGTATCTCAGGACACACAGGAAATGGCTTATTCTACCAAGCGACAGAGATTCTAGTGGATCAAGGT
 TACAGCTTAAAGTAATCACAAGCTAGCTGGCATGGAGGAAGAGGAGCTGGCGTCTCCACCAAAGAGG
 AGCAGCAGCAGCTCCTGCAGAAGGTGCTGGCAGCCACCGACTGGATGCAGAGGAGGAAGTGGTGGCTGG
 AGAGTTTGGCTCTAGATCTGGCCAGGCATCCCAGCCTGTGGCACCATGAGTCCCTGTCAGGCGCAGAC
 GACACCGTGTACATGGAGTACCACTCCTCCGAAGCAAGGCCCTCCAGCAAGCAGTGCACCCGCTTTTCA
 AACGCTTCAGGAAGTGACGCCACCCCTGTGCTCAGGTGAAGACTGGCTGCCTGGATCCGTGTTGAAGAGA
 GACTTCTTTCTTACCAGTGTGATCGTTTCTATCCAAGACTGTGCTCTTCTATTGACTGACTGCTGAA
 AACCCAGTCAGTGTGAGGCCTTAACTGCCTTCGTGGTCTAGGTTTAAAAAGGAAAGAAAAGCTACTGTT
 GTTTTTTATTCAAACCTTGTAAAGAGTGAATCATTCTGTATATAAAAAATTATACCACTTAATTATAAAAA AAAAAAAAAA

- Restriction Sites:** RsrII-NotI
- ACCN:** NM_133658
- Insert Size:** 2352 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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: [BC026575](#), [AAH26575](#)

RefSeq Size: 2670 bp

RefSeq ORF: 2352 bp

Locus ID: 13872

UniProt ID: [P49135](#)

Cytogenetics: 18 B1

Gene Summary: ATP-dependent 3'-5' DNA helicase, component of the general transcription and DNA repair factor IIH (TFIIH) core complex, which is involved in general and transcription-coupled nucleotide excision repair (NER) of damaged DNA and, when complexed to CAK, in RNA transcription by RNA polymerase II. In NER, TFIIH acts by opening DNA around the lesion to allow the excision of the damaged oligonucleotide and its replacement by a new DNA fragment. The ATPase activity of XPB/ERCC3, but not its helicase activity, is required for DNA opening. In transcription, TFIIH has an essential role in transcription initiation. When the pre-initiation complex (PIC) has been established, TFIIH is required for promoter opening and promoter escape. The ATP-dependent helicase activity of XPB/ERCC3 is required for promoter opening and promoter escape. Phosphorylation of the C-terminal tail (CTD) of the largest subunit of RNA polymerase II by the kinase module CAK controls the initiation of transcription.[UniProtKB/Swiss-Prot Function]