

Product datasheet for RR215076L3

Ercc3 (NM_001031644) Rat Tagged Lenti ORF Clone

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Product data:

Product Type: Expression Plasmids

Product Name: Ercc3 (NM_001031644) Rat Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Ercc3

Synonyms: MGC112916

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

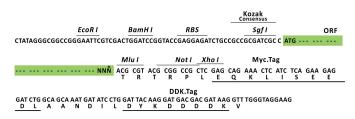
ORF Nucleotide The ORF insert of this clone is exactly the same as(RR215076).

Sgfl-Mlul

Sequence:

Restriction Sites: Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_001031644

ORF Size: 2346 bp



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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: <u>NM 001031644.1</u>, <u>NP 001026814.1</u>

 RefSeq Size:
 2643 bp

 RefSeq ORF:
 2349 bp

 Locus ID:
 291703

 UniProt ID:
 Q4G005

 Cytogenetics:
 18p12

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 preinitiation 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

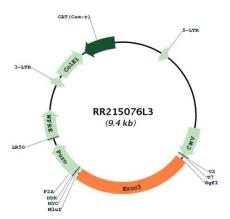
opening and promoter escape. Phosphorylation of the C-terminal tail (CTD) of the largest

subunit of RNA polymerase II by the kinase module CAK controls the initiation of

transcription.[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for RR215076L3