

Product datasheet for **RC239134**

ZRANB3 (NM_001286569) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZRANB3 (NM_001286569) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ZRANB3
Synonyms:	4933425L19Rik; AH2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC239134 representing NM_001286569
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTGGGGAATGTGAATCGCAAGGCTCAAGTTACAGGGAGCACACTGAACGGTAGGAAAGAAAAATTC
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Protein Sequence:

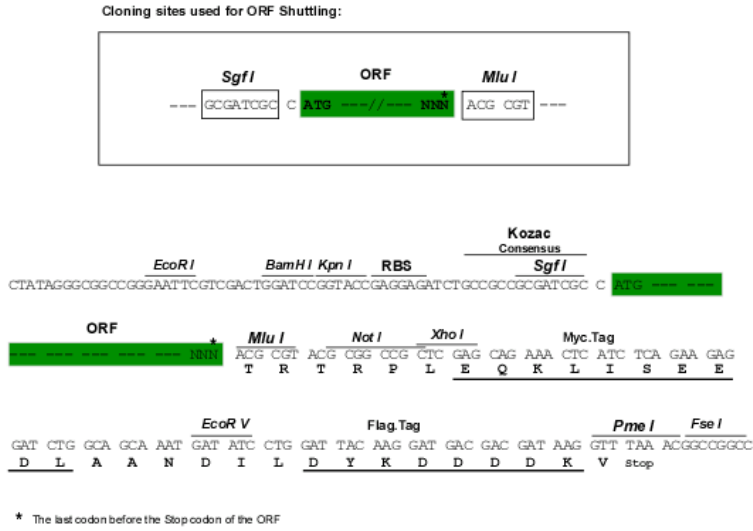
>RC239134 representing NM_001286569
 Red=Cloning site Green=Tags(s)

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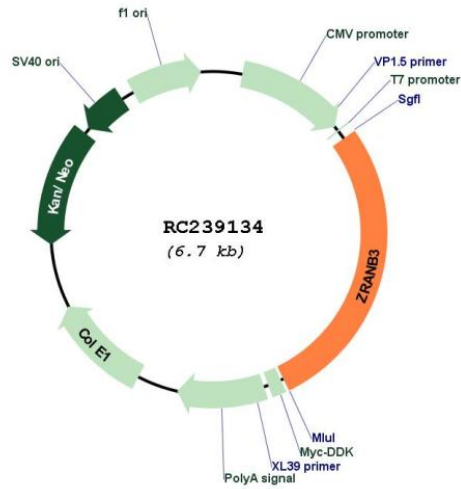
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Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001286569

ORF Size: 1875 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.
RefSeq:	NM_001286569.1 , NP_001273498.1
RefSeq Size:	6958 bp
RefSeq ORF:	1878 bp
Locus ID:	84083
Cytogenetics:	2q21.3
Protein Families:	Druggable Genome
MW:	72 kDa
Gene Summary:	DNA annealing helicase and endonuclease required to maintain genome stability at stalled or collapsed replication forks by facilitating fork restart and limiting inappropriate recombination that could occur during template switching events (PubMed:21078962, PubMed:22704558, PubMed:22705370, PubMed:22759634, PubMed:26884333). Recruited to the sites of stalled DNA replication by polyubiquitinated PCNA and acts as a structure-specific endonuclease that cleaves the replication fork D-loop intermediate, generating an accessible 3'-OH group in the template of the leading strand, which is amenable to extension by DNA polymerase (PubMed:22759634). In addition to endonuclease activity, also catalyzes the fork regression via annealing helicase activity in order to prevent disintegration of the replication fork and the formation of double-strand breaks (PubMed:22705370, PubMed:22704558). [UniProtKB/Swiss-Prot Function]