

Product datasheet for **RG239134**

ZRANB3 (NM_001286569) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZRANB3 (NM_001286569) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ZRANB3
Synonyms:	4933425L19Rik; AH2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG239134 representing NM_001286569.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGTGGGAATGTTGAATCGCAAGGCTCAAGTTACAGGGAGCACACTGAACGGTAGGAAAGAAAAAATT
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
```

Protein Sequence:

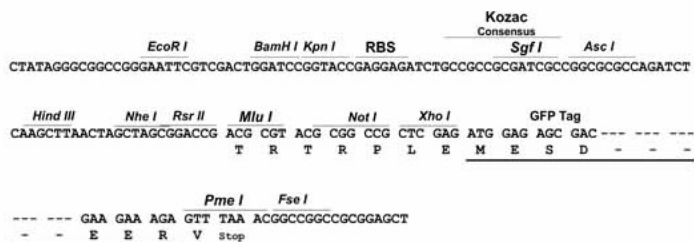
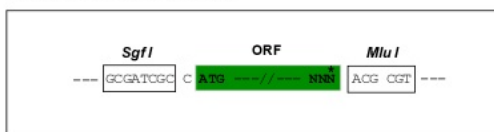
>Peptide sequence encoded by RG239134
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MWGM LN RKAQVTGSLN GRKEKIQAEEGDKEKWDFLQFAEAWTPNDSSEELRKEALFTHFEKEKQHDIR
SFFVPPQPKKRQLMTSCDESKRFREENTVSSDPTKTAARDIIDYESDVEPETKRLKLAASEDHCPSEE
TPSQSKQIRTPLVESVQEAKAQLTTPAFPVEGWQCSLCTYINNSSELPYCEMCETPQGSAMVQIDSLNHI
QDKNEKDDSQDTSKKVQTI SDCEKQALAQSEPGQLADSKEETPKIEKEDGLTSQPGNEQWKSSDLPV
YDTLMFCASRNTRDRIHIYTKDGKQMSCNFIPLDIKLDLWEDLPASFQKQYRSLILRFVREWSSLTAMK
QRIIRKSGQLFCSPILALEEITKQQTQKQNTKRYITKEDVAVASMDKVKNVGGHVRILITKESRPRDPT
KKLLEDGACVPFLNPYTVQADLTVKPSTSKGYLQAVDNEGNPLCLRCQQPTCQTKQACKANSWDSRFCS
LKCQEEFWIRSNNSYLRAKVFETEHEGVCQLCNVNAQELFLRLRDPKSRKNNLLYATWTSKLPLEQLNE
MIRNPEGHFHWQVDHIKPYVGGGQCSLDNLQTLCTVCHKERTARQAKERSQVRRQSLASKHGSDITRF
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TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
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SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLSRDGGYSSVVDSSHMFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
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Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



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).

RefSeq: [NM_001286569.1](#), [NP_001273498.1](#)

RefSeq Size: 6958 bp

RefSeq ORF: 1878 bp

Locus ID: 84083

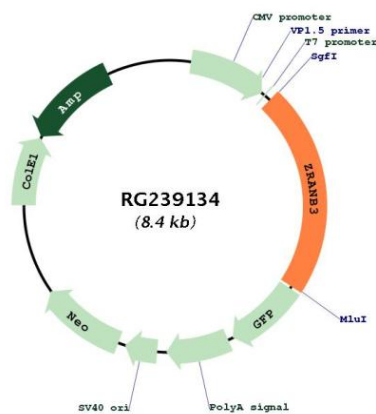
Cytogenetics: 2q21.3

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]

Product images:

Circular map for RG239134