

## **Product datasheet for MC226177**

## Rnf138 (NM\_001303011) Mouse Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Rnf138 (NM\_001303011) Mouse Untagged Clone

Tag: Tag Free Symbol: Rnf138

Synonyms: 2410015A17Rik; 2810480D20Rik; STRIN; Trif; Trif-d

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC226177 representing NM\_001303011

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

AGTAAACATGTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

**ACCN:** NM\_001303011

**Insert Size:** 573 bp



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**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).

**OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal

tag.

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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 001303011.1</u>, <u>NP 001289940.1</u>

 RefSeq Size:
 2746 bp

 RefSeq ORF:
 573 bp

 Locus ID:
 56515

 UniProt ID:
 Q9CQE0

Cytogenetics: 18 A2

**Gene Summary:** E3 ubiquitin-protein ligase involved in DNA damage response by promoting DNA resection

and homologous recombination. Recruited to sites of double-strand breaks following DNA

damage and specifically promotes double-strand break repair via homologous

recombination. Two different, non-exclusive, mechanisms have been proposed. According to

a report, regulates the choice of double-strand break repair by favoring homologous

recombination over non-homologous end joining (NHEJ): acts by mediating ubiquitination of XRCC5/Ku80, leading to remove the Ku complex from DNA breaks, thereby promoting homologous recombination. According to another report, cooperates with UBE2Ds E2

 $ubiquitin\ ligases\ (UBE2D1,\ UBE2D2,\ UBE2D3\ or\ UBE2D4)\ to\ promote\ homologous$ 

recombination by mediating ubiquitination of RBBP8/CtIP. Together with NLK, involved in the ubiquitination and degradation of TCF/LEF. Also exhibits auto-ubiquitination activity in combination with UBE2K. May act as a negative regulator in the Wnt/beta-catenin-mediated

signaling pathway.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (4) lacks two alternate in-frame exons in the 3' coding region,

compared to variant 1. The resulting protein (isoform 4) is shorter than isoform 1.