

## **Product datasheet for SC310503**

## RNF146 (NM 030963) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: RNF146 (NM\_030963) Human Untagged Clone

Tag: Tag Free Symbol: RNF146

Mammalian Cell None

Selection:

Vector: pCMV6-XL5

**E. coli Selection:** Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM\_030963 edited

ATGGCTGGCTGTGAAATTGATCATTCAATAAACATGCTTCCTACAAACAGGAAAGCG AACGAGTCCTGTTCTAATACTGCACCTTCTTTAACCGTCCCTGAATGTGCCATTTGTCTG AAAGGAGCTTCATGGCTTGGAAAGCGGTGTGCTCTTTGTCGACAAGAAATTCCCGAGGAT TTCCTTGACAAGCCAACCTTGTTGTCACCAGAAGAACTCAAGGCAGCAAGTAGAGGAAAT GGTGAATATGCATGGTATTATGAAGGAAGAAATGGGTGGTGGCAGTACGATGAGCGCACT AGTAGAGAGCTGGAAGATGCTTTTTCCAAAGGTAAAAAGAACACTGAAATGTTAATTGCT GGCTTTCTGTATGTCGCTGATCTTGAAAACATGGTTCAATATAGGAGAAATGAACATGGA CGTCGCAGGAAGATTAAGCGAGATATAATAGATATACCAAAGAAGGGAGTAGCTGGACTT GACAGTGTATCAGCACAGAGTGGAGCTTCTGTTCAGCCCCTAGTGTCTTCTGTAAGGCCC CTAACATCAGTAGATGGTCAGTTAACAAGCCCTGCAACACCATCCCCTGATGCAAGCACT TCTCTGGAAGACTCTTTTGCTCATTTACAACTCAGTGGAGACAACACAGCTGAAAGGAGT GACACCTCCATTGAAGAAACTGAATCAGATGCCAGTAGTGATAGTGAGGATGTATCTGCA GTTGTTGCACAGCACTCCTTGACCCAACAGAGACTTTTGGTTTCTAATGCAAACCAGACA GTACCCGATCGATCAGATCGATCGGGAACTGATCGATCAGTAGCAGGGGGTGGAACAGTG AGTGTCAGTGTCAGATCTAGAAGGCCTGATGGACAGTGCACAGTAACTGAAGTTTAA

**Restriction Sites:** Please inquire ACCN: NM\_030963

**Insert Size:** 2300 bp



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## RNF146 (NM\_030963) Human Untagged Clone - SC310503

**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:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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 030963.2</u>, <u>NP 112225.2</u>

RefSeq Size:2158 bpRefSeq ORF:1077 bpLocus ID:81847UniProt ID:Q9NTX7

Cytogenetics: 6q22.33

Domains: RING, WWE

**Protein Families:** Druggable Genome



## **Gene Summary:**

E3 ubiquitin-protein ligase that specifically binds poly-ADP-ribosylated (PARsylated) proteins and mediates their ubiquitination and subsequent degradation. May regulate many important biological processes, such as cell survival and DNA damage response. Acts as an activator of the Wnt signaling pathway by mediating the ubiquitination of PARsylated AXIN1 and AXIN2, 2 key components of the beta-catenin destruction complex. Acts in cooperation with tankyrase proteins (TNKS and TNKS2), which mediate PARsylation of target proteins AXIN1, AXIN2, BLZF1, CASC3, TNKS and TNKS2. Recognizes and binds tankyrase-dependent PARsylated proteins via its WWE domain and mediates their ubiquitination, leading to their degradation. Different ubiquitin linkage types have been observed: TNKS2 undergoes ubiquitination at 'Lys-48' and 'Lys-63', while AXIN1 is only ubiquitinated at 'Lys-48'. May regulate TNKS and TNKS2 subcellular location, preventing aggregation at a centrosomal location. Neuroprotective protein. Protects the brain against N-methyl-D-aspartate (NMDA) receptor-mediated glutamate excitotoxicity and ischemia, by interfering with PAR-induced cell death, called parthanatos. Prevents nuclear translocation of AIFM1 in a PAR-binding dependent manner. Does not affect PARP1 activation (By similarity). Protects against cell death induced by DNA damaging agents, such as N-methyl-N-nitro-N-nitrosoguanidine (MNNG) and rescues cells from G1 arrest. Promotes cell survival after gamma-irradiation. Facilitates DNA repair.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) differs in the 5' UTR, compared to variant 1. Variants 1-7 encode the same isoform (a).