

## Product datasheet for **SC331903**

### RNF146 (NM\_001242850) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RNF146 (NM\_001242850) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** RNF146  
**Vector:** pCMV6-Entry (PS100001)  
**Fully Sequenced ORF:** >SC331903 representing NM\_001242850.  
Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
ATGATGGCTGGCTGTGGTGA AATTGATCATTCAATAAACATGCTTCTACAAACAGGAAAGCGAACGAG
TCCTGTTCTAATACTGCACCTTTTAAACCGTCCCTGAATGTGCCATTTGTCTGCAAACATGTGTTTCAT
CCAGTCAGTCTGCCCTGTAAGCACGTTTTCTGCTATCTATGTGTAAGGAGCTTCATGGCTTGGAAAG
CGGTGTGCTCTTTGTGCGACAAGAAATCCCGAGGATTTCTTGACAAGCCAACCTTGTGTACCAGAA
GAACTCAAGGCAGCAAGTAGAGGAAATGGTGAATATGCATGGTATTATGAAGGAAGAAATGGGTGGTGG
CAGTACGATGAGCGCACTAGTAGAGAGCTGGAAGATGCTTTTTCCAAAGGTA AAAAAGAACACTGAAATG
TTAATTGCTGGCTTTCTGTATGTCGCTGATCTTGA AAACATGGTTCAATATAGGAGAAATGAACATGGA
CGTCGCAGGAAGATTAAGCGAGATATAATAGATATACCAAAGAAGGGAGTAGCTGGACTTAGGCTAGAC
TGTGATGCTAATACCGTAAACCTAGCAAGAGAGAGCTCTGCTGACGGAGCGGACAGTGTATCAGCACAG
AGTGGAGCTTCTGTT CAGCCCCTAGTGTCTTCTGTAAGGCCCTAACATCAGTAGATGGTCAGTTAACA
AGCCCTGCAACACCATCCCCTGATGCAAGCACTTCTCTGGAAGACTCTTTTGCTCATTTACAACCTCAGT
GGAGACAACACAGCTGAAAGGAGTCATAGGGGAGAAGGAGAAGAAGATCATGAATCACCATCTTCAGGC
AGGGTACCAGCACCAGACACCTCCATTGAAGAACTGAATCAGATGCCAGTAGTGATAGTGAGGATGTA
TCTGCAGTTGTTGCACAGCACTCCTTGACCCAACAGAGACTTTTGGTTTCTAATGCAAACAGACAGTA
CCCAGTGCATCAGATCGATCGGGAAC TATCGATCAGTAGCAGGGGTGGAACAGTGAGTGTGAGTGTG
AGATCTAGAAGGCTGATGGACAGTGCACAGTAACTGAAGTTAA
```

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001242850  
**Insert Size:** 1080 bp  
**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).  
**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:** [NM\\_001242850.1](#)

**RefSeq Size:** 2163 bp

**RefSeq ORF:** 1080 bp

**Locus ID:** 81847

**UniProt ID:** [Q9NTX7](#)

**Cytogenetics:** 6q22.33

**Protein Families:** Druggable Genome

**MW:** 39 kDa

**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 (9) lacks two alternate internal exons, which results in the use of an upstream start codon, compared to variant 1. The encoded isoform (b) has a longer N-terminus than isoform a. Variants 8-10 encode the same isoform (b).