



**Protein Sequence:** >RC202306 protein sequence  
Red=Cloning site Green=Tags(s)

MAGCGEIDHSINMLPTNRKANESCSNTAPSLTVPECAICLQTCVHPVSLPCKHVFCYLCVKGASWLGKRC  
 ALCRQEIPEDFLDKPTLLSPEELKAASRNGEYAWYYEGRNGWQYDERTSRELEDAFSKGGKNTLEMLIA  
 GFLYVADLENMVQYRRNEHGRRRIKRDIIIDIPKKGAVGLRLDCDANTVNLARESSADGADSVSAQSGAS  
 VQPLVSSVRPLTSVDGQLTSPATPSPDASTLEDSFAHLQLSGDNTAERSHRGEGEEDHESPSSGRVPAP  
 DTSIEETESDASSEDVSAVVAQHSLTQQRLLVSNANQTVPDRSDRSGTDRSVAGGGTVSVSVRSRRPD  
 GQCTVTEV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6023\\_c01.zip](https://cdn.origene.com/chromatograms/mk6023_c01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_030963

**ORF Size:** 1074 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:**

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\\_030963.3](#)

**RefSeq Size:** 2400 bp

**RefSeq ORF:** 1077 bp

**Locus ID:** 81847

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

**Cytogenetics:** 6q22.33

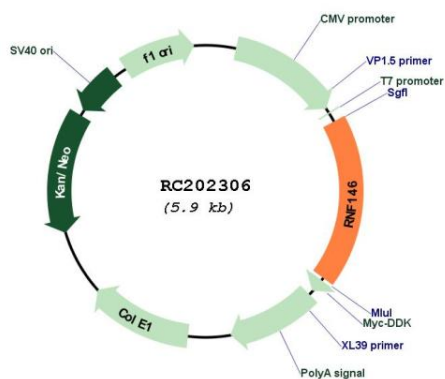
**Domains:** RING, WWE

**Protein Families:** Druggable Genome

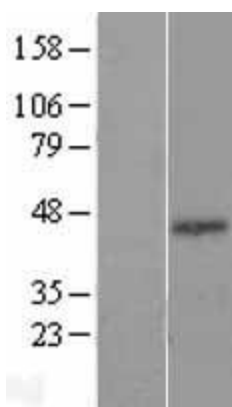
**MW:** 38.8 kDa

**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]

Product images:



Circular map for RC202306



Western blot validation of overexpression lysate (Cat# [LY410627]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202306 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).