

# **Product datasheet for TP300753L**

#### OriGene Technologies, Inc.

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### RRP4 (EXOSC2) (NM\_014285) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human exosome component 2 (EXOSC2), 1 mg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC200753 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MAMEMRLPVARKPLSERLGRDTKKHLVVPGDTITTDTGFMRGHGTYMGEEKLIASVAGSVERVNKLICVK ALKTRYIGEVGDIVVGRITEVQQKRWKVETNSRLDSVLLLSSMNLPGGELRRRSAEDELAMRGFLQEGDL ISAEVQAVFSDGAVSLHTRSLKYGKLGQGVLVQVSPSLVKRQKTHFHDLPCGASVILGNNGFIWIYPTPE HKEEEAGGFIANLEPVSLADREVISRLRNCIISLVTQRMMLYDTSILYCYEASLPHQIKDILKPEIMEEI

VMETRQRLLEQEG

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK

**Predicted MW:** 32.6 kDa

Concentration:  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 055100

Locus ID: 23404



#### RRP4 (EXOSC2) (NM\_014285) Human Recombinant Protein - TP300753L

UniProt ID: Q13868
RefSeq Size: 2034
Cytogenetics: 9q34.12
RefSeq ORF: 879

**Synonyms:** hRrp4p; p7; RRP4; Rrp4p; SHRF

Summary: Non-catalytic component of the RNA exosome complex which has 3'->5' exoribonuclease

activity and participates in a multitude of cellular RNA processing and degradation events. In the nucleus, the RNA exosome complex is involved in proper maturation of stable RNA species such as rRNA, snRNA and snoRNA, in the elimination of RNA processing by-products and non-

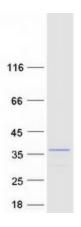
coding 'pervasive' transcripts, such as antisense RNA species and promoter-upstream transcripts (PROMPTs), and of mRNAs with processing defects, thereby limiting or excluding

their export to the cytoplasm. The RNA exosome may be involved in Ig class switch recombination (CSR) and/or Ig variable region somatic hypermutation (SHM) by targeting AICDA deamination activity to transcribed dsDNA substrates. In the cytoplasm, the RNA exosome complex is involved in general mRNA turnover and specifically degrades inherently unstable mRNAs containing AU-rich elements (AREs) within their 3' untranslated regions, and in RNA surveillance pathways, preventing translation of aberrant mRNAs. It seems to be involved in degradation of histone mRNA. The catalytic inactive RNA exosome core complex of 9 subunits (Exo-9) is proposed to play a pivotal role in the binding and presentation of RNA for ribonucleolysis, and to serve as a scaffold for the association with catalytic subunits and accessory proteins or complexes. EXOSC2 as peripheral part of the Exo-9 complex stabilizes the hexameric ring of RNase PH-domain subunits through contacts with EXOSC4 and EXOSC7.

[UniProtKB/Swiss-Prot Function]

**Protein Pathways:** RNA degradation

## **Product images:**



Coomassie blue staining of purified EXOSC2 protein (Cat# [TP300753]). The protein was produced from HEK293T cells transfected with EXOSC2 cDNA clone (Cat# [RC200753]) using MegaTran 2.0 (Cat# [TT210002]).