

Product datasheet for TP511386

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Pum2 (NM_001160222) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse pumilio RNA-binding family member 2 (Pum2), with C-

terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA Clone or AA

Sequence:

>MR211386 representing NM 001160222

Red=Cloning site Green=Tags(s)

MNHDFQALALESRGMGELLPTKKFWEPDDSTKDGQKGIFLGDDEWRETAWGTSHHSMSQPIMVQRRSGQS
FHGNSEVNAILSPRSESGGLGVSMVEYVLSSSPADKLDSRFRKGTFGTRDAETDGPEKGDQKGKASPFEE
DQNRDLKQDDEDSKINGRGLPNGMDADCKDFNRTPGSRQASPTEVVERLGPSTNPPEGLGPLPNPTANKP
LVEEFSNPETQNLDAMDQVGLDSLQFDYPGNQVPMDSSGATVGLFDYNSQQQLFQRTSALTVQQLTAAQQ
QQYALAAAQQPHIAGVFSAGLAPAAFVPNPYIISAAPPGTDPYTAAGLAAAATLAGPAVVPPQYYGVPWG
VYPANLFQQQAAAAASNTANQQAASQAQPGQQQVLRPGAGQRPITPSQGQQGQQAESLAAAANPTLAFGQ
SLAAGMPGYQVLAPTAYYDQTGALVVGPGARTGLGAPVRLMAPTPVLISSTAAQAAAAAAAAGGTANSLT
GSTNGLFRPIGTQPPQQQQQQQPSTNLQSNSFYGSSSLTNSSQSSSLFSHGPGQPGSASLGFGSGSSLG
AAIGSALSGFGSSGGLTNGSGRYISAAPGAEAKYRSASSTSSLFSSSSQLFPPSRLRYNRSDIMPSGRSR
LLEDFRNNRFPNLQLRDLIGHIVEFSQDQHGSRFIQQKLERATPAERQIVFNEILQAAYQLMTDVFGNYV
IQKFFEFGSLDQKLALATRIRGHVLPLALQMYGCRVIQKALESISSDQQSEMVKELDGHVLKCVKDQNGN
HVVQKCIECVQPQSLQFIIDAFKGQVFVLSTHPYGCRVIQRILEHCTAEQTLPILEELHQHTEQLVQDQY
GNYVIQHVLEHGRPEDKSKIVSEIRGKVLALSQHKFASNVVEKCVTHASRAERALLIDEVCCQNDGPHSA

LYTMMKDQYANYVVQKMIDMAEPAQRKIIMHKIRPHITTLRKYTYGKHILAKLEKYYLKNSPDLGPIGGP

PNGML

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-MYC/DDK
Predicted MW: 106.6 kDa

Concentration: >0.05 µg/µL 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





Pum2 (NM_001160222) Mouse Recombinant Protein - TP511386

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 after receiving vials.

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 001153694

Locus ID: 80913

UniProt ID: <u>Q80U58</u>, <u>Q3TQ29</u>

RefSeq Size: 5883 Cytogenetics: 12 A1.1 RefSeq ORF: 2955

Synonyms: 5730503J23Rik; Pumm2

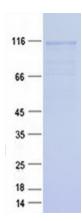
Summary: Sequence-specific RNA-binding protein that acts as a post-transcriptional repressor by binding the

3' UTR of mRNA targets. Binds to an RNA consensus sequence, the Pumilio Response Element (PRE), 5'-UGUANAUA-3', that is related to the Nanos Response Element (NRE). Mediates post-transcriptional repression of transcripts via different mechanisms: acts via direct recruitment of the CCR4-POP2-NOT deadenylase leading to translational inhibition and mRNA degradation. Also mediates deadenylation-independent repression by promoting accessibility of miRNAs. Acts as a post-transcriptional repressor of E2F3 mRNAs by binding to its 3' UTR and facilitating miRNA regulation. Plays a role in cytoplasmic sensing of viral infection. Represses a program of genes necessary to maintain genomic stability such as key mitotic, DNA repair and DNA replication factors. Its ability to repress those target mRNAs is regulated by the IncRNA NORAD (non-coding RNA activated by DNA damage) which, due to its high abundance and multitude of PUMILIO binding sites, is able to sequester a significant fraction of PUM1 and PUM2 in the cytoplasm. May regulate DCUN1D3 mRNA levels. May support proliferation and self-renewal of stem cells. Binds specifically to miRNA MIR199A precursor, with PUM1, regulates miRNA MIR199A expression at a

postranscriptional level (By similarity).[UniProtKB/Swiss-Prot Function]



Product images:



Purified recombinant protein Pum2 was analyzed by SDS-PAGE gel and Coomossie Blue Staining.