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

Product datasheet for MC201294

Nop53 (NM_133831) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nop53 (NM_133831) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Nop53
Synonyms:	5330430H08Rik; 9430097C02Rik; AU041936; AW536441; PICT-1; R74911
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>BC017637 sequence for NM_133831 CGGACGCGTGGGCGGACGCGTGGGTCAGAAGATGGCTGCGGGTGGTAACAGGGACGGTGAGAAGCGCGGC TCGAGAAGCCAGGCGGACTCTGGCTTCCTGGGGCTGCGGCCGACCTCGGTGGATCCCGCTCTGAGGCGGC GGCGGCGGGGCCCCAGAAACAAGAAGCGCGGCTGGAGGAGGCTCGCCGAGGAGCCGCTGGGGTTAGAGGT CGACCAGTTCCTGGAAGACGTCCGGCTACAGGAGCGCACGACCGGTGGCTTGTTGGCAGAGGCCCCAAAC GAAAAGCTCTTCTTCGTGGACACAGGATTCAAGAGAAAAGAACCAAGAAAGAAGAGGACCTTGGTCCAGA AGAAGTCACAGCGTCTCCAGAAACCCTTACGGGTTGACCTTGCCCTTGAGAATCATTCTAAGATCCCTGC TCCCAAAGACATCCTCGCACATCAGGTCCCTAATGCCAAGAAGCTCAGGCGAAAGGAGGAGTTATGGGAG AAACTGGCAAAGCAGGGCGAACTGCCCAGGGATGTGCGCAAGGCACAGGCCCGACTCCTTAGCCCTCCCA CACCAAAGGCCAAACCTGGGCCCCAGGACATCATTGAGCGACCCTTCTATGACCTCTGGAACCCAGACAA CCCTCTGGACACGCCTTTGATTGGTCAGGATGCATTTTTTCTGGAACAGACCAAGAAGAAAGGCGTGAGG CGGCCACAACGCCTCCACATCAAGCCTTCCCAGGTGCCTGCAGTGGAGGTGATTCCTGCAGGAGCCTCCT ACAACCCAACCTTTGAAGATCACCAGGCCCTGCTTCGAGAGGCCCATGAGGTGGAGCTGCAGCGTGAGAA AGAGGCAGAAAAGCTGGAGCGACAGCTGGCCCTGCCCACCTCAGAGCAAGCTGCCACCCAGGAGTCCGTG TTTCGGGAGATGTGTGAGGGCCTGCTGGAGGAGTCTGATGGTGAGGATGAGCATGAGGCAGGCCGTGCCG CGCAGCCAGAGGCTGGTGATGGGACCACCGAGATCTCACCCACTGGTGCTGCTGGTCCTGAGAAGAGGAT GGAGAAGAAGACGGAGCAGCAGCGGCGGCGGGAGAAAGCTGCTCGCAAGCTGCGGGTGCAGCAGGCTGCA CTGAGGGCAGCCCGGCTTCAGCACCAAGAACTTTTCAGGCTGCGTGGGATCAAGGCCCAGGTGGTCCGAA GGCTGGCAGAACTGGCACGCCGGAGGGAGCAGCGGCGCATACGGCGACTGGCAGAGGCTGACAAGCCCCG AAGGCTGGGACGGCTCAAGTACCAGGCTCCTGACATTGATGTGCAGCTCAGCTCTGAGTTGTCTGGCTCA CTCAGGACACTGAAGCCAGAAGGTCACATTCTCCGAGACAGGTTCAAGAGCTTCCAGAAGAGAAATATGA TTGAGCCCCGAGAACGAGCCAAGTTCAAGCGCAAATACAAAGTGAAGCTGGTGGAGAAGCGGGCCTACCG TGAGATTCAGTTGTAGCTGTGCAGATGTCGGAGCCCCGCCCCTCAATAAAGTTCTGTGACCAAAAAAAAA AAAAAAAAAAAAAAAAA
Restriction Sites:	RsrII-NotI

View online »

ACCN:	NM_133831
Insert Size:	1455 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:	BC017637, AAH17637
RefSeq Size:	1557 bp
RefSeq ORF:	1455 bp
Locus ID:	68077
UniProt ID:	Q8BK35
Cytogenetics:	7 A2
Gene Summary:	Nucleolar protein which is involved in the integration of the 5S RNP into the ribosomal large subunit during ribosome biogenesis. In ribosome biogenesis, may also play a role in rRNA transcription (By similarity). Also functions as a nucleolar sensor that regulates the activation of p53/TP53 in response to ribosome biogenesis perturbation, DNA damage and other stress conditions. DNA damage or perturbation of ribosome biogenesis disrupt the interaction between NOP53 and RPL11 allowing RPL11 transport to the nucleoplasm where it can inhibit MDM2 and allow p53/TP53 activation (PubMed:21804542). It may also positively regulate the function of p53/TP53 in cell cycle arrest and apoptosis through direct interaction, preventing its MDM2-dependent ubiquitin-mediated proteasomal degradation. Originally identified as a tumor suppressor, it may also play a role in cell proliferation and apoptosis by positively regulating the stability of PTEN, thereby antagonizing the PI3K-AKT/PKB signaling pathway. May also inhibit cell proliferation and increase apoptosis through its interaction with NF2. May negatively regulate NPM1 by regulating its nucleoplasmic localization, oligomerization and ubiquitin-mediated proteasomal degradation. Thereby, may prevent NPM1 interaction with MYC and negatively regulate transcription mediated by the MYC-NPM1 complex. May also regulate cellular aerobic respiration. In the cellular response to viral infection, may play a role in the attenuation of interferon-beta through the inhibition of DDX58/RIG-1 (By similarity).[UniProtKB/Swiss-Prot Function]