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Product datasheet for SC323686

RNase L (RNASEL) (NM_021133) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RNase L (RNASEL) (NM_021133) Human Untagged Clone
Tag:	Tag Free
Symbol:	RNase L
Synonyms:	PRCA1; RNS4
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene ORF within SC323686 sequence for NM_021133 edited (data generated by NextGen Sequencing)

ATGGAGAGCAGGGATCATAACAACCCCCAGGAGGGACCCACGTCCTCCAGCGGTAGAAGG
GCTGCAGTGGAAGACAATCACTTGCTGATTAAAGCTGTTCAAAACGAAGATGTTGACCTG
GTCCAGCAATTGCTGGAAGGTGGAGCCAATGTTAATTTCCAGGAAGAGGAAGGGGGCTGG
ACACCTCTGCATAACGCAGTACAAATGAGCAGGGAGGACATTGTGGAACTTCTGCTTCGT
CATGGTGCTGACCCTGTTCTGAGGAAGAAGAATGGGGCCACGCCTTTTATCCTCGCAGCG
ATTGCGGGGAGCGTGAAGCTGCTGAAACTTTTCCTTTCTAAAGGAGCAGATGTCAATGAG
TGTGATTTTTATGGCTTCACAGCCTTCATGGAAGCCGCTGTGTATGGTAAGGTCAAAGCC
CTAAAATTCCTTTATAAGAGAGGAGCAAATGTGAATTTGAGGCGAAAGACAAAGGAGGAT
CAAGAGCGGCTGAGGAAAGGAGGGGCCACAGCTCTCATGGACGCTGCTGAAAAAGGACAC
GTAGAGGTCTTGAAGATTCTCCTTGATGAGATGGGGGCAGATGTAAACGCCTGTGACAAT
ATGGGCAGAAATGCCTTGATCCATGCTCTCCTGAGCTCTGACGATAGTGATGTGGAGGCT
ATTACGCATCTGCTGCTGGACCATGGGGCTGATGTCAATGTGAGGGGAGAAAGAGGGAAG
ACTCCCCTGATCCTGGCAGTGGAGAAGAAGCACTTGGGTTTGGTGCAGAGGCTTCTGGAG
CAAGAGCACATAGAGATTAATGACACAGACAGTGATGGCAAAACAGCACTGCTGCTTGCT
GTTGAACTCAAACTGAAGAAAATCGCCGAGTTGCTGTGCAAACGTGGAGCCAGTACAGAT
TGTGGGGATCTTGTTATGACAGCGAGGCGGAATTATGACCATTCCCTTGTGAAGGTTCTT
CTCTCTCATGGAGCCAAAGAAGATTTTCACCCTCCTGCTGAAGACTGGAAGCCTCAGAGC
TCACACTGGGGGGCAGCCCTGAAGGATCTCCACAGAATATACCGCCCTATGATTGGCAAA
CTCAAGTTCTTTATTGATGAAAAATACAAAATTGCTGATACTTCAGAAGGAGGCATCTAC
CTGGGGTTCTATGAGAAGCAAGAAGTAGCTGTGATGACGTTCTGTGAGGGCAGCCCACGT
GCACAGCGGGAAGTCTCTTGTCTGCAAAGCAGCCGAGAGAACAGTCACTTGGTGACATTC
TATGGGAGTGAGAGCCACAGGGGCCACTTGTTTGTGTGTGTCACCCTCTGTGAGCAGACT
CTGGAAGCGTGTTTGGATGTGCACAGAGGGGAAGATGTGGAAAATGAGGAAGATGAATTT
GCCCGAAATGTCCTGTCATCTATATTTAAGGCTGTTCAAGAACTACACTTGTCCTGTGGA
TACACCCACCAGGATCTGCAACCACAAAACATCTTAATAGATTCTAAGAAAGCTGCTCAC
CTGGCAGATTTTGATAAGAGCATCAAGTGGGCTGGAGATCCACAGGAAGTCAAGAGAGAT
CTAGAGGACCTTGGACGGCTGGTCCTCTATGTGGTAAAGAAGGGAAGCATCTCATTTGAG
GATCTGAAAGCTCAAAGTAATGAAGAGGTGGTTCAACTTTCTCCAGATGAGGAAACTAAG
GACCTCATTCATCGTCTCTTCCATCCTGGGGAACATGTGAGGGACTGTCTGAGTGACCTG
CTGGGTCATCCCTTCTTTTGGACTTGGGAGAGCCGCTATAGGACGCTTCGGAATGTGGGA
AATGAATCCGACATCAAAACACGAAAATCTGAAAGTGAGATCCTCAGACTACTGCAACCT
GGGCCTTCTGAACATTCCAAAATTTTTGACAAGTGGACGACTAAGATTAATGAATGTGTT
ATGAAAAAAATGAATAAGTTTTATGAAAAAAGAGGCAATTTCTACCAGAACACTGTGGGT
GATCTGCTAAAGTTCATCCGGAATTTGGGAGAACACATTGATGAAGAAAAGCATAAAAAG
ATGAAATTAAAAATTGGAGACCCTTCCCTGTATTTTCAGAAGACATTTCCAGATCTGGTG
ATCTATGTCTACACAAAACTACAGAACACAGAATATAGAAAGCATTTCCCCCAAACCCAC
AGTCCAAACAAGCCTCAGTGTGATGGAGCTGGTGGGGCCAGTGGGTTGGCCAGCCCTGGG
TGCTGA

Clone variation with respect to NM_021133.3
1175 a=>t;1883 g=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_021133 unedited
CCCGCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAA
CCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACCAGCTGCTCGGGCTGCAA
GCAGTCTTCCAGGCTTTGCGGCTGCCAAAGGAATAATTGAGACGTCTGAGTTGAGCAGGTGGAATGTCAG
AAGACTGAGAACATTGTTCCTTCTTCATACTGCTGCTCTGTTGCCAGAGAATCCCAATTTACACTCAAAG
CTTCTTTGATTAAGTGCTAGGAGATAAATTTGCATTTTCTCAAGGAAAAGGCTAAAAGTGGTAGCAGGGT
GGCATTTACCGTCATGGGAGAGCAGGGATCATAACAACCCCCCAGGAAGGGACCCACGTCCTTCCAGCGG
TAGAAGGGCTGCAGTGGAAGACAATCACTTGCTGATTAAAGCTGGTTCAAAACGAAGAATGTTGACTTGT
TCAGCATTGCTGGGAGGTGGAGCAAAGGTAAATTTCAGAAAAAGGAAGGGGCCTGGACCCCCCCCATTAA
GGGATTCCAATGGGCGAGGGAGGACTTTGGAATTTTCCTCTGGCAAGGTGCCTGACCGGTTCTAGAGAAG
AGATGGGCCACGCTTTTACTCTCACAGATTCGGGAGCCGTAACTCTCGAACCTTCCTTTAAGAGACAATG
CAGAGGGAATTTAGGCCAACTTTGGACCCTGTGTTGAAGCAACCTAATCCTTAAAGCATGAATAGCCACA
GGATCAGGTGAAAGGCCACCTAGCTCGAAGACTTAGCTGATCTGAATTGCAATACCGGTAATGCAATGCT
TCGCTGCTTCAAGTGAGCTC

Kinase Domain Sequence:

>SC323686 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI refernce protein database, you can confirm the presence of the kinase-deficient mutation
CWTGATTGGCACTCAGTTCTTTATTGATGAAAATACAAAATTGCTGATACTTCAGAAGGAGGCATCTACC
TGGGGTTCTATGAGAAGCAAGAAGTAGCTGTGATGACGTTCTGTGAGGGCAGCCCACGTGCACAGCGGGA
AGTCTCTTGTCTGCAAAGCAGCCGAGAGAACAGTCACTTGGTGACATTCTATGGGAGTGAGAGCCACAGG
GGCCACTTGTTTGTGTGTGTCACCCTCTGTGAGCAGACTCTGGAA

Restriction Sites: Please inquire

ACCN: NM_021133

Insert Size: 4700 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell. 2008 May p536-548.

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_021133.2, NP_066956.1
RefSeq Size:	4166 bp
RefSeq ORF:	2226 bp
Locus ID:	6041
UniProt ID:	Q05823
Cytogenetics:	1q25.3
Domains:	pkinase, ANK, S_TKc, PUG
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	This gene encodes a component of the interferon-regulated 2-5A system that functions in the antiviral and antiproliferative roles of interferons. Mutations in this gene have been associated with predisposition to prostate cancer and this gene is a candidate for the hereditary prostate cancer 1 (HPC1) allele. [provided by RefSeq, Jul 2008]