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Product datasheet for RN207246

Clp1 (NM_001009599) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Clp1 (NM_001009599) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Clp1
Synonyms:	Heab; RGD1307679
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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Fully Sequenced ORF:

>RN207246 representing NM_001009599
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGTGAGGAATCCAATGATGACAAGAAGCCAACGACCAAGTTTGAACTAGAGCGAGAAACAGAGCTTC
GATTTGAGGTGGAGGCATCTCAGTCAGTTCAGTTGGAGTTGCTGGCTGGCATGGCAGAGATCTTTGGCAC
AGAACTGACCAGAAACAAGAAATTCACCTTTGATGCTGGTGCCAAGGTGGCTGTTTTCACTTGGCATGGC
TGTTCTCTGCAGTTGAGTGGCCGGACCGAGGTGGCTTATGTCTCTAAGGACACCCCTATGTTGCTTTACC
TTAACACTCATACAGCCTTGGAGCAGATGCGGAGGCAGGCAGAAAAGGAAGAAGAGAGAGGCCCCCGAGT
GATGGTTGTGGGTCCTACTGATGTGGGCAAGTCCACGGTGTGCCGGCTGCTACTCAACTACGCAGTGCGT
TTGGGCCGACGTCCTACTTACGTGGAGTTGGATGTAGGGCAGGGCTCTGTGTCCATTCCTGGTACCATGG
GGGCCCTGTACATTGAGCGACCCGCAGATGTGGAAGAAGGTTTCTCCATCCAGGCACCTCTTGTGTATCA
TTTTGGCTCCACCACTCCTGGCACCAACATCAAGCTTTACAACAAGATTACATCTCGTTTAGCAGATGTG
TTCAACCAAAGGTGTGAAGTGAATAGAAGAGCTTCTGTGAGTGGCTGTGTCATCAACACCTGTGGCTGGG
TCAAGGGTTATGGTTACCAGGCCCTGGTGCACGCAGCTTCAGCCTTTGAGGTGGATGTGGTTGTGGTTCT
GGATCAAGAACGACTGTACAACGAGTTGAAAAGGGACCTGCCTCATTTTGTTCGAACTGTGCTGCTCCCA
AAATCAGGGGGTGTGGTAGAACGCTCCAAGGACTTCCGGCGGGAATGTAGGGATGAACGTATCCGTGAAT
ATTTCTATGGATTCCGAGGCTGTTTCTATCCCCATGCCTTCAATGTCAAATTTTCTGATGTGAAAATCTA
CAAAGTTGGGGCACCCACCATCCCAGACTCGTGTTTACCTCTGGGCATGTCTCAGGAAGACAATCAGCTC
AAGTTAGTACCTGTCACCCCTGGTAGAGATATGGTGCACCATCTCCTGAGTGTCAGCACTGCTGAGGGCA
CAGAAGAGAACCTTTCTGAGACAAGTGTGGCTGGATTCATTGTTGTGACCAGTGTGGACGTGGAACACCA
GGTGTTTACTGTCTTGTCTCCAGCCCCCCGCCCACTGCCTAAGAACTTTCTTCTCATCATGGATATCCGG
TTCATGGATCTCAAGTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001009599

Insert Size: 1278 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: NM_001009599.1, NP_001009599.1

RefSeq Size:	1835 bp
RefSeq ORF:	1278 bp
Locus ID:	311166
UniProt ID:	Q5PQL4
Cytogenetics:	3q24
Gene Summary:	Polynucleotide kinase that can phosphorylate the 5'-hydroxyl groups of double-stranded RNA (dsRNA), single-stranded RNA (ssRNA), double-stranded DNA (dsDNA) and double-stranded DNA:RNA hybrids. dsRNA is phosphorylated more efficiently than dsDNA, and the RNA component of a DNA:RNA hybrid is phosphorylated more efficiently than the DNA component. Plays a key role in both tRNA splicing and mRNA 3'-end formation. Component of the tRNA splicing endonuclease complex: phosphorylates the 5'-terminus of the tRNA 3'-exon during tRNA splicing; this phosphorylation event is a prerequisite for the subsequent ligation of the two exon halves and the production of a mature tRNA. Its role in tRNA splicing and maturation is required for cerebellar development. Component of the pre-mRNA cleavage complex II (CF-II), which seems to be required for mRNA 3'-end formation. Also phosphorylates the 5'-terminus of exogenously introduced short interfering RNAs (siRNAs), which is a necessary prerequisite for their incorporation into the RNA-induced silencing complex (RISC). However, endogenous siRNAs and microRNAs (miRNAs) that are produced by the cleavage of dsRNA precursors by DICER1 already contain a 5'-phosphate group, so this protein may be dispensible for normal RNA-mediated gene silencing (By similarity). [UniProtKB/Swiss-Prot Function]