Product datasheet for RC224761

CENPA (NM_001809) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CENPA (NM_001809) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CENPA
Synonyms:	CenH3; CENP-A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224761 representing NM_001809 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGGCCCGCGCCGCCGGAGCCGAAAGCCCGAGGCCCCGAGGAGGCGCAGCCCGAGCCCGACCCCGACCC CCGGCCCCTCCCGGCGGGGCCCCTCCTTAGGCGCTTCCTCCCATCAACACAGTCGGCGGAGACAAGGTTG GCTAAAGGAGATCCGAAAGCTTCAGAAGAGCACACACCTCTTGATAAGGAAGCTGCCCTTCAGCCGCCTG GCAAGAGAAATATGTGTTAAATTCACTCGTGGTGTGGACTTCAATTGGCAAGCCCAGGCCCTATTGGCCC TACAAGAGGCAGCAGAAGCATTTCTAGTTCATCTCTTTGAGGACGCCTATCTCCTCACCTTACATGCAGG CCGAGTTACTCTCTTCCCAAAGGATGTGCAACTGGCCCGGAGGATCCGGGGCCTTGAGGAGGGACTCGGC ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Protein Sequence:	>RC224761 representing NM_001809 Red=Cloning site Green=Tags(s) MGPRRRSRKPEAPRRRSPSPTPTPGPSRRGPSLGASSHQHSRRRQGWLKEIRKLQKSTHLLIRKLPFSRL AREICVKFTRGVDFNWQAQALLALQEAAEAFLVHLFEDAYLLTLHAGRVTLFPKDVQLARRIRGLEEGLG TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Chromatograms:	https://cdn.origene.com/chromatograms/mk6118_b08.zip
Restriction Sites:	SgfI-MluI

Cloning Scheme:

| ACCN:	NM_001809
ORF Size:	420 bp
OTI Disclaimer:	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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001809.4
RefSeq Size:	1389 bp
RefSeq ORF:	423 bp

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Locus ID:	1058
UniProt ID:	P49450
Cytogenetics:	2p23.3
MW:	15.8 kDa

Gene Summary: Centromeres are the differentiated chromosomal domains that specify the mitotic behavior of chromosomes. This gene encodes a centromere protein which contains a histone H3 related histone fold domain that is required for targeting to the centromere. Centromere protein A is proposed to be a component of a modified nucleosome or nucleosome-like structure in which it replaces 1 or both copies of conventional histone H3 in the (H3-H4)2 tetrameric core of the nucleosome particle. The protein is a replication-independent histone that is a member of the histone H3 family. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Nov 2015]
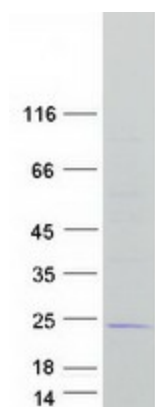
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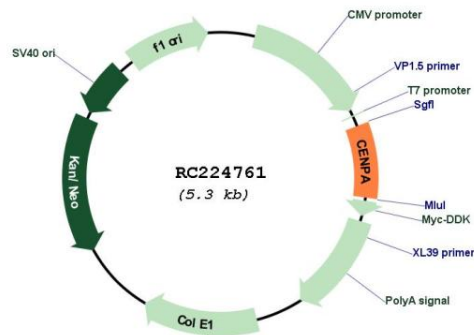
Circular map for RC224761
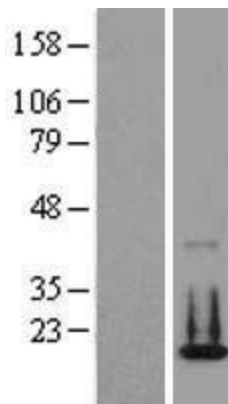
Western blot validation of overexpression lysate (Cat# [LY400687]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224761 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified CENPA protein (Cat# [TP324761]). The protein was produced from HEK293T cells transfected with CENPA cDNA clone (Cat# RC224761) using MegaTran 2.0 (Cat# [TT210002]).