

Product datasheet for **RC203350**

FKSG14 (CENPK) (NM_022145) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FKSG14 (CENPK) (NM_022145) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FKSG14
Synonyms:	AF5alpha; CENP-K; FKSG14; P33; Solt
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203350 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAATCAGGAGGATCTAGATCCGGATAGTACTACAGATGTGGGAGATGTTACAAATACTGAAGAAGAAC
TTATTAGAGAATGTGAAGAAATGTGAAAGATATGGAAGAATGTCAGAATAAATTATCACTTATTGGAAC
TGAAACACTCACCGATTCAAATGCTCAGCTATCATTGTTAATTATGCAAGTAAATGTTTAAACCGTGAA
CTCAGTCAATGGCAGAAAAAACACCTGAAACAATCCCTTGACTGAAGACGTTCTCATAACATTAGGAA
AAGAAGAGTTCCAAAAGCTGAGACAAGATCTTGAAATGGTACTGTCCACTAAGGAGTCAAAGAATGAAAA
GTTAAAGGAAGACTTAGAAAGGGAACAACGGTGGTTGGATGAACAGCAACAGATAATGGAATCTCTTAAT
GTACTACACAGTGAATTGAAAAATAAGGTTGAAACATTTTCTGAATCAAGAATCTTTAATGAACTGAAAA
CTAAAAATGCTTAATATAAAAAATATAAGGAGAACTCTTGAGTACCTTGGGCGAGTTTCTAGAAGACCA
TTTTCTCTGCCTGATAGAAGTGTAAAAAGAAAAAGAAAAACATTCAAGAATCATCTGTAACCTGATA
ACACTGCATGAAATGTTAGAGATTCTTATAAATAGATTATTTGATGTTCCACATGATCCATATGTCAAAA
TTAGTGATTCCTTTGGCCACCTTATGTTGAGCTGCTGCGTAATGGAATTGCCTTGAGACATCCAGA
AGATCCAACCCGAATAAGATTAGAAGCTTTCCATCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC203350 protein sequence
 Red=Cloning site Green=Tags(s)

MNQEDLDPDSTTDVGDVTNTEEELIRECEEMWKDMEECQNKLSLIGTETLTDNSNAQLSLLIMQVKCLTAE
 LSQWQKTPETIPLTEDVLITLGKEEFQKLKRDLEMVSLTKESKNEKLDLEREQRWLDEQQIMESLN
 VLHSELKNKVETFSERIFNELKTKMLNIKEYEKLLSTLGEFLEDHFPLPDRSVKKNKNIQESSVNLII
 TLHEMLEILINRLFDVPHDPYVKISDSFWPPYVELLLRNGIALRHPEDPTRIRLEAFHQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6416_b08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_022145

ORF Size: 807 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.

RefSeq: [NM_022145.5](#)

RefSeq Size: 1753 bp

RefSeq ORF: 810 bp

Locus ID: 64105

UniProt ID: [Q9BS16](#)

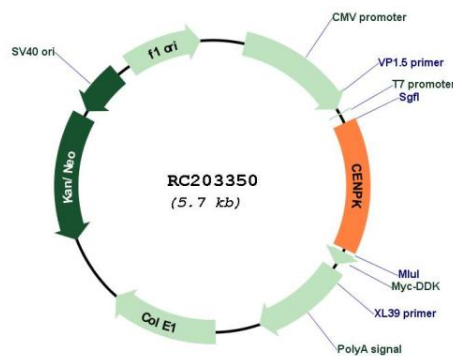
Cytogenetics: 5q12.3

Protein Families: Druggable Genome

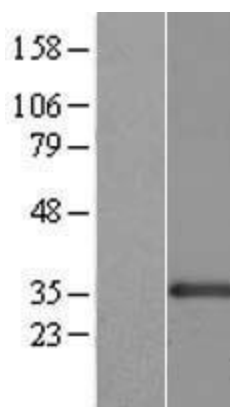
MW: 31.7 kDa

Gene Summary: CENPK is a subunit of a CENPH (MIM 605607)-CENPI (MIM 300065)-associated centromeric complex that targets CENPA (MIM 117139) to centromeres and is required for proper kinetochore function and mitotic progression (Okada et al., 2006 [PubMed 16622420]). [supplied by OMIM, Mar 2008]

Product images:



Circular map for RC203350



Western blot validation of overexpression lysate (Cat# [LY411750]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203350 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).