

Product datasheet for RC222296

SKA2 (NM_001100595) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SKA2 (NM_001100595) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: SKA2
Synonyms: FAM33A
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC222296 representing NM_001100595
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCCTCGGAGGTGGGGCACAATTTGGAGTCGCCGAACTCCGGGCGGCGGAGGCTGGACCAGAGTCG
 AGTTCCTCCTCCTGCACCAAAGGGAGCCGCCACCGTCTGGTGTCTAAACCGCTCGGTTCCAGAAAGCT
 GAGTCTGATCTGGATTACATTCAATACAGGCTGGAATATGAAATCAAGACTAATCATCTGATTAGCAA
 GTGAGCTGTCACCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC222296 representing NM_001100595
 Red=Cloning site Green=Tags(s)

MASEVGHNLESPETPGGGWTRVEFPPAPKGAATVWCLNRLGSRKLSLIWITFNTGWNMKSRLIILIQQ
 VSCHH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8041_a01.zip

Restriction Sites: SgfI-MluI


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Cloning Scheme:


ACCN: NM_001100595

ORF Size: 225 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_001100595.2](#)

RefSeq Size: 2988 bp

RefSeq ORF: 228 bp

Locus ID: 348235

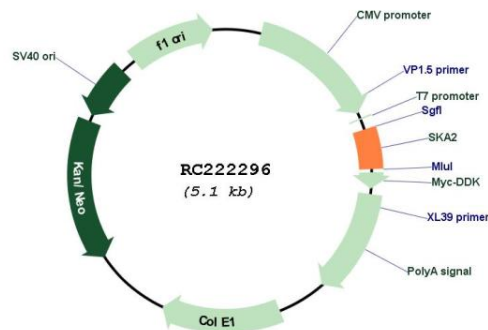
UniProt ID: [Q8WVK7](#)

Cytogenetics: 17q22

MW: 8.1 kDa

Gene Summary: Component of the SKA1 complex, a microtubule-binding subcomplex of the outer kinetochore that is essential for proper chromosome segregation (PubMed:17093495, PubMed:19289083, PubMed:23085020). Required for timely anaphase onset during mitosis, when chromosomes undergo bipolar attachment on spindle microtubules leading to silencing of the spindle checkpoint (PubMed:17093495). The SKA1 complex is a direct component of the kinetochore-microtubule interface and directly associates with microtubules as oligomeric assemblies (PubMed:19289083). The complex facilitates the processive movement of microspheres along a microtubule in a depolymerization-coupled manner (PubMed:17093495, PubMed:19289083). In the complex, it is required for SKA1 localization (PubMed:19289083). Affinity for microtubules is synergistically enhanced in the presence of the ndc-80 complex and may allow the ndc-80 complex to track depolymerizing microtubules (PubMed:23085020).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC222296