

Product datasheet for **SC316631**

SKA2 (NM_001100595) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SKA2 (NM_001100595) Human Untagged Clone
Tag:	Tag Free
Symbol:	SKA2
Synonyms:	FAM33A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC316631 representing NM_001100595. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTG
 GATCCGGTACCGAGGAGATCTGCCGCC**CGCATCGCC**
 ATGGCCTCGGAGGTGGGCACAATTTGGAGTCGCCGAAACTCCGGGCGGCGAGGCTGGACCAGAGTC
 GAGTTCCTCCTCTGCACCAAAGGGAGCCGCCACCGTCTGGTGTCTAAACCGCCTCGGTTCCAGAAAG
 CTGAGTCTGATCTGGATTACATTCAATACAGGCTGGAATATGAAATCAAGACTAATCATCTGATTACG
 CAAGTGAGCTGTCAACCACTGA
 ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
 TACAAGGATGACGACGATAAGGTTAAACGGCCGGC

Restriction Sites:	SgfI-MluI
ACCN:	NM_001100595
Insert Size:	228 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.


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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:	<ol style="list-style-type: none"> 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:	<u>NM_001100595.1</u>
RefSeq Size:	2988 bp
RefSeq ORF:	228 bp
Locus ID:	348235
UniProt ID:	<u>Q8WVK7</u>
Cytogenetics:	17q22
MW:	8.3 kDa
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) has multiple differences in the coding region, compared to variant 1, one of which results in a translational frameshift. The resulting protein (isoform 2) has a distinct C-terminus and is shorter than isoform 1. The biological validity of the predicted protein sequence needs to be experimentally verified.</p>