

Product datasheet for RR215228

Ska2 (NM_001009624) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Ska2 (NM_001009624) Rat Tagged ORF Clone

Tag: Myc-DDK

Symbol: Ska2

Synonyms: Fam33a; RGD1307084

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RR215228 representing NM_001009624

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR215228 representing NM_001009624

Red=Cloning site Green=Tags(s)

MEAEVDKLELMFQKADSDLDYLQYRLEYEVKINHPHSAGEKNAVAILKELSAIKSRYQALCARFKTVSVE QKETKSCICAILNKTMTMLQELQKQTNLELTLLTEEEKAVTERLKSHVPDVENGILQRNFDGEKISSKEI

QRGV

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Restriction Sites: Sgfl-Mlul



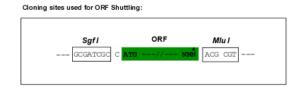
OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

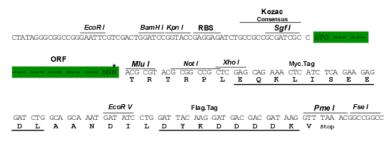
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



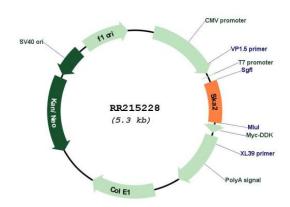
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001009624

ORF Size: 432 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: <u>NM 001009624.1</u>, <u>NP 001009624.1</u>

 RefSeq Size:
 1214 bp

 RefSeq ORF:
 435 bp

 Locus ID:
 287598

 UniProt ID:
 Q51014

 Cytogenetics:
 10q26

 MW:
 16.5 kDa

Gene Summary: Component of the SKA1 complex, a microtubule-binding subcomplex of the outer

kinetochore that is essential for proper chromosome segregation. Required for timely anaphase onset during mitosis, when chromosomes undergo bipolar attachment on spindle microtubules leading to silencing of the spindle checkpoint. The SKA1 complex is a direct

component of the kinetochore-microtubule interface and directly associates with

microtubules as oligomeric assemblies. The complex facilitates the processive movement of microspheres along a microtubule in a depolymerization-coupled manner. In the complex, it is required for SKA1 localization. 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.[UniProtKB/Swiss-Prot Function]