

Product datasheet for RC212018

Aurora A (AURKA) (NM_198433) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aurora A (AURKA) (NM_198433) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aurora A
Synonyms:	AIK; ARK1; AURA; BTAK; PPP1R47; STK6; STK7; STK15
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212018 representing NM_198433 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACCGATCTAAAGAAAAGTGCATTTTCAGGACCTGTTAAGGCTACAGCTCCAGTTGGAGGTCCAAAAC
GTGTTCTCGTACTCAGCAATTTCTTGTGAGAATCCATTACCTGTAATAGTGGCCAGGCTCAGCGGT
CTTGTGTCCTTCAAATTTCCAGCGCTTCTTTGCAAGCACAAAAGCTTGTCTCCAGTCACAAGCCG
GTTCAGAATCAGAAGCAGAAGCAATTGCAGGCAACCAGTGTACCTCATCTGTCTCCAGGCCACTGAATA
ACACCCAAAAGAGCAAGCAGCCCTGCCATCGGCACCTGAAAATAATCTGAGGAGGAACGGCATCAAA
ACAGAAAAATGAAGAATCAAAAAGAGGAGTGGGCTTTGGAAGACTTTGAAATGGTCGCCCTCTGGGT
AAAGGAAAGTTTGGTAATGTTTATTTGGCAAGAGAAAAGCAAAGCAAGTTTATTCTGGCTCTTAAAGTGT
TATTTAAAGCTCAGCTGGAGAAAGCCGGAGTGGAGCATCAGCTCAGAAGAGAAGTAGAAATACAGTCCCA
CCTTCGGCATCCTAATATTCTTAGACTGTATGGTTATTTCCATGATGCTACCAGAGTCTACCTAATTCTG
GAATATGCACCACTTGGAAACAGTTTATAGAGAATTCAGAAAATTTCAAAGTTTGATGAGCAGAGAACTG
CTACTTATATAACAGAATTGGCAAATGCCCTGTCTTACTGTTCATTCGAAGAGAGTTATTCATAGAGACAT
TAAGCCAGAGAACTTACTTCTGGATCAGCTGGAGAGCTTAAAATTGCAGATTTTGGGTGGTCAGTACAT
GCTCCATCTTCCAGGAGGACCCTCTGTGGCACCCCTGGACTACCTGCCCTGAAATGATTGAAGGTC
GGATGCATGATGAGAAGGTGGATCTCTGGAGCCTTGGAGTTCTTTGCTATGAATTTTGGTGGGAAGCC
TCCTTTTGGGCAAAACACATACCAAGAGACCTACAAAAGAATATCACGGTTGAATTCACATTCCTGAC
TTTGTAACAGAGGGAGCCAGGGACCTCATTTCAAGACTGTTGAAGCATAATCCCAGCCAGAGGCCAATGC
TCAGAGAAGTACTTGAACACCCCTGGATCACAGCAAATTCATCAAACCATCAAATGGCCAAAACAAAGA
ATCAGCTAGCAAACAGTCT

ACGCGTACGCGGCCGCTCGAGCAGAAAAGTCTCAGAAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC212018 representing NM_198433
Red=Cloning site Green=Tags(s)

MDRSKENCISGPVKATAPVGGPKRVLVTQQFPCQNPLPVNSGQAQRVLCPSNSSQRVPLQAQKLVSHPK
 VQNQKQKQLQATSVPHVSRPLNNTQKSKQPLSAPENNPEEELASKQKNEESKKRQWALED FEIGRPLG
 KGKFGNVYLAREKQSKFILALKVLFKAQLEKAGVEHQLRREVEIQSHLRHPNLRLYGYFHDATRVYLIL
 EYAPLGTVYRELQKLSKFDEQRTATYITELANALSYCHSKRVIHRDIKPENLLLSAGELKIADFGWSVH
 APSRRRTLCGTLDYLPPEMIEGRMHDEKVDLWSLGVLCYEFVGVKPPFEANTYQETYKRISRVEFTFPD
 FVTEGARDLISRLLKHNPSQRPMLREVLEHPWITANSSKPSNCQNKESASKQS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6119_g09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_198433

ORF Size: 1209 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_198433.3](#)

RefSeq Size: 2554 bp

RefSeq ORF: 1212 bp

Locus ID: 6790

UniProt ID: [O14965](#)

Cytogenetics: 20q13.2

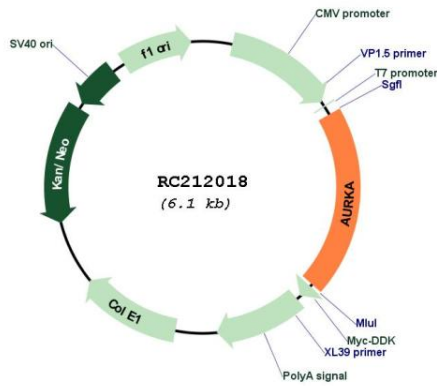
Protein Families: Druggable Genome, Protein Kinase, Stem cell - Pluripotency

Protein Pathways: Oocyte meiosis

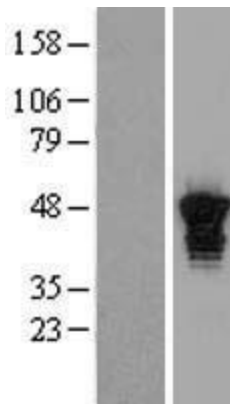
MW: 45.6 kDa

Gene Summary: The protein encoded by this gene is a cell cycle-regulated kinase that appears to be involved in microtubule formation and/or stabilization at the spindle pole during chromosome segregation. The encoded protein is found at the centrosome in interphase cells and at the spindle poles in mitosis. This gene may play a role in tumor development and progression. A processed pseudogene of this gene has been found on chromosome 1, and an unprocessed pseudogene has been found on chromosome 10. Multiple transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]

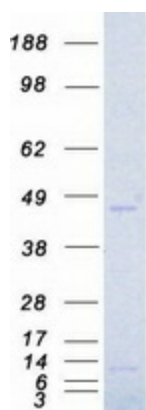
Product images:



Circular map for RC212018



Western blot validation of overexpression lysate (Cat# [LY403678]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212018 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AURKA protein (Cat# [TP312018]). The protein was produced from HEK293T cells transfected with AURKA cDNA clone (Cat# RC212018) using MegaTran 2.0 (Cat# [TT210002]).