

## Product datasheet for RC216460

### Aurora A (AURKA) (NM\_003600) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Aurora A (AURKA) (NM_003600) 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:	>RC216460 representing NM_003600 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGACCGATCTAAAGAAAAGTGCATTTTCAGGACCTGTTAAGGCTACAGCTCCAGTTGGAGGTCCAAAACGTGTTCTCGTACTCAGCAATTTCTTGTGAGAATCCATTACCTGTAATAGTGGCCAGGCTCAGCGGTCTTGTGTCCTTCAAATTTCCAGCGCTTCTTTGCAAGCACAAAAGCTTGTCTCCAGTCACAAGCCGTTCCAGAAATCAGAAGCAGAAGCAATTGCAGGCAACCAGTGTACCTCATCTGTCTCCAGGCCACTGAATAACACCCAAAAGAGCAAGCAGCCCTGCCATCGGCACCTGAAAATAATCTGAGGAGAACTGGCATCAAAACAGAAAAATGAAGAATCAAAAAAGAGGAGTGGGCTTTGGAAGACTTTGAAATGGTCGCCCTCTGGGTAAGGAAAAGTTTGGTAATGTTTATTTGGCAAGAGAAAAGCAAAGCAAGTTTATTCTGGCTCTTAAAGTGTATTTAAAGCTCAGCTGGAGAAAGCCGGAGTGGAGCATCAGCTCAGAAGAGAAGTAGAAATACAGTCCCACTTCGGCATCCTAATATTCTTAGACTGTATGGTTATTTCCATGATGCTACCAGAGTCTACCTAATCTGGAATATGCACCACTTGGAAACAGTTTATAGAGAATTCAGAAAATTTCAAAGTTTGATGAGCAGAGAACTGCTACTTATATAACAGAATTGGCAAATGCCCTGTCTTACTGTTCATTCGAAGAGAGTTATTCATAGAGACATTAAGCCAGAGAACTTACTTCTGGATCAGCTGGAGAGCTTAAAATGCAGATTTTGGGTGGTCAGTACATGCTCCATCTTCCAGGAGGACCCTCTGTGGCACCCCTGGACTACCTGCCCTGAAATGATTGAAGGTCGGATGCATGATGAGAAGGTGGATCTCTGGAGCCTTGGAGTTCTTTGCTATGAATTTTAGTTGGGAAGCCCTTTTTGAGGCAACACATACCAAGAGACCTACAAAAGAATATCACGGTTGAATTCACATTTCCCTGACTTTGTAACAGAGGGAGCCAGGGACCTCATTTCAAGACTGTTGAAGCATAATCCCAGCCAGAGGCCAATGCTCAGAGAAGTACTTGAACACCCCTGGATCACAGCAAATTCATCAAACCATCAAATGGCCAAAACAAAGAATCAGCTAGCAAACAGTCT

ACGCGTACGCGGCCGCTCGAGCAGAAAATCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC216460 representing NM\_003600  
Red=Cloning site Green=Tags(s)

MDRSKENCISGPVKATAPVGGPKRVLVTQQFPCQNPLPVNSGQAQRVLCPSNSSQRVPLQAQKLVSHPK  
 VQNQKQKQLQATSVPHVSRPLNNTQKSKQPLSAPENNPEEELASKQKNEESKKRQWALED FEIGRPLG  
 KGKFGNVYLAREKQSKFILALKVLFKAQLEKAGVEHQLRREVEIQSHLRHPNLRLYGYFHDATRVYLIL  
 EYAPLGTVYRELQKLSKFDEQRTATYITELANALSYCHSKRVIHRDIKPENLLLSAGELKIADFWSVH  
 APSRRRTLCGTLDYLPPEMIEGRMHDEKVDLWSLGVLCYEFVLVGKPPFEANTYQETYKRISRVEFTFPD  
 FVTEGARDLISRLLKHNPSQRPMLREVLEHPWITANSSKPSNCQNKESASKQS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6541\\_b10.zip](https://cdn.origene.com/chromatograms/mk6541_b10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_003600

**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.

**RefSeq:** [NM\\_003600.4](#)

**RefSeq Size:** 2346 bp

**RefSeq ORF:** 1212 bp

**Locus ID:** 6790

**UniProt ID:** [O14965](#)

**Cytogenetics:** 20q13.2

**Domains:** pkinase, TyrKc, S\_TKc

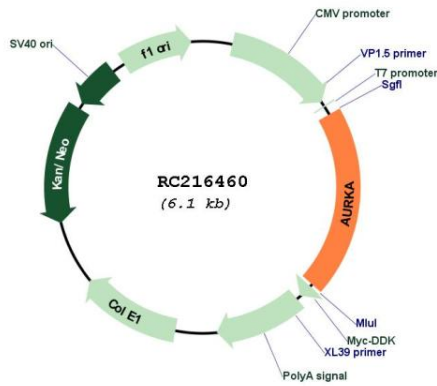
**Protein Families:** Druggable Genome, Protein Kinase, Stem cell - Pluripotency

**Protein Pathways:** Oocyte meiosis

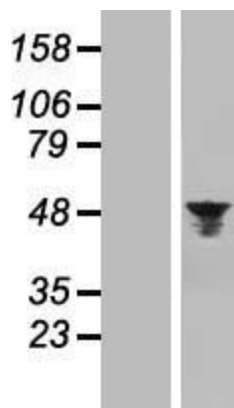
**MW:** 45.6 kDa

**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 RC216460



Western blot validation of overexpression lysate (Cat# [LY418569]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216460 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).