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Product datasheet for MR203721

Aurkc (NM_020572) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aurkc (NM_020572) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aurkc
Synonyms:	AIE1; AIK3; ARK-3; IAK3; Stk13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR203721 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCCCAGCACCTCAACCAGGAAGCATTTCACCATCAATGACTTTGAAATCGGGCGTCCTCTGGGCA
GGGGGAAATTTGGGCGTGTGTACTTGGCTCGGCTCAAGGAAAATCATTTCATCGTGGCCCTGAAGGTCCT
CTTCAAGTCTGAGATAGAGAAGGAGGGATTGGAGCACCAACTTCGCAGGGAAGTGGAGATCCAGGCACAC
CTACAACACCGGAACATCCTTCGCCTGTACAACTACTTCTATGATGACACTCGGATATACTTAATTCTGG
AGTATGCTCCAGGAGGAGAGCTCTATAAGGAGCTTCAGAGACATCAGAAGTTGGACCAGCAGCGTACAGC
CACGATAATACAGGAGTTGTCAGATGCCCTGACCTACTGCCATGAGAAGAAGGTGATTCACAGGGACATC
AAGCCAGAGAATCTCCTGCTGGGCCTCAATGGTGAGGTGAAGATCTCAGACTTTGGGTGGTCTGTGCATA
CCCCCTCTCTCAGGAGAAAGACAATGTGTGGGACTCTGGACTACTTGCCCCCGGAAATGATAGCGCAGAA
ACCGTACAATGAGATGGTTGATCTGTGGTGCATTGGGGTGCTCTGCTATGAGCTGCTGGTGGGGAAGCCA
CCCTTTGAGAGCAGCACCTCCAGTGAGACATACAGACGCATCCGCCAGGTGGATTTTAAGTTTCCTTCAT
CAGTACCTGCAGGAGCCCAGGACTTGATCTCCAAGCTTCTTAGGTACCATCCTTCAGAGCGGCTGAGCCT
GGCCCAGGTCCTGAAGCACCCCTGGGTCAGGGAACACTCTCGAAGGGTGCTTCCTTGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

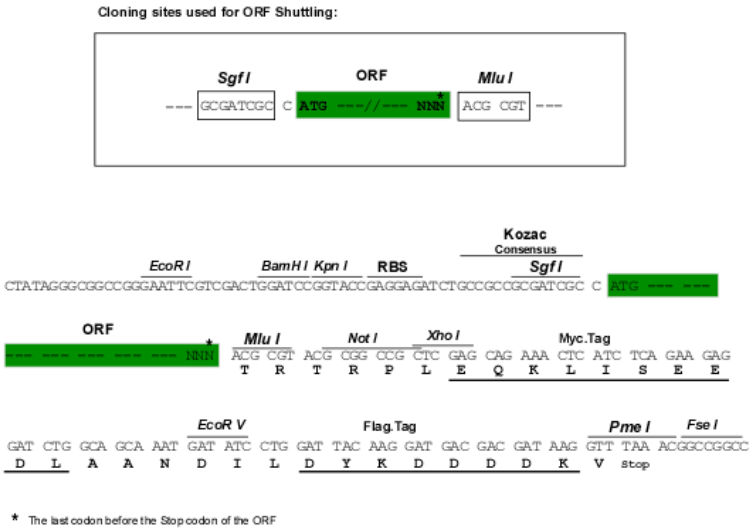
>MR203721 protein sequence
Red=Cloning site Green=Tags(s)

MEPSTSTRKHFTINDFEIGRPLGRGKFGRVYLARLKENHFIVALKVLFKSEIEKEGLEHQLRREVEIQAH
LQHRNILRLYNYFYDDTRIYLILEYAPGGELYKELQRHQKLDQQRTATIIQELSDALTYCHEKKVIHRDI
KPENLLLGLNGEVKISDFGWSVHTPSLRRKTMCGTLDYLPPEMIAQKPYNEMVDLWCIGVLCYELLVGKP
PFESSTSSETYRRIRQVDFKFPSSVPAGAQDLISKLLRYHPSERLSLAQVLKHPWVREHSRRVLPC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020572

ORF Size: 831 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_020572.2, NP_065597.2

RefSeq Size: 1332 bp

RefSeq ORF: 831 bp

Locus ID: 20871

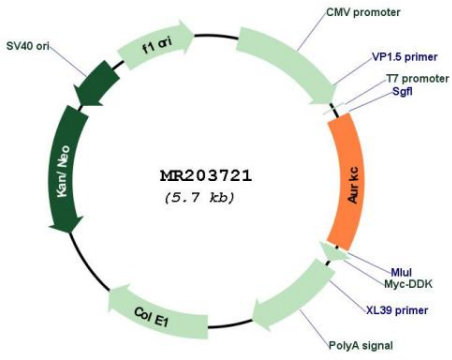
UniProt ID: O88445

Cytogenetics: 7 4.06 cM

MW: 32.4 kDa

Gene Summary: Serine/threonine-protein kinase component of the chromosomal passenger complex (CPC), a complex that acts as a key regulator of mitosis. The CPC complex has essential functions at the centromere in ensuring correct chromosome alignment and segregation and is required for chromatin-induced microtubule stabilization and spindle assembly. Plays also a role in meiosis and more particularly in spermatogenesis. Has redundant cellular functions with AURKB and can rescue an AURKB knockdown. Like AURKB, AURKC phosphorylates histone H3 at 'Ser-10' and 'Ser-28'. AURKC phosphorylates the CPC complex subunits BIRC5/survivin and INCENP leading to increased AURKC activity. Phosphorylates TACC1, another protein involved in cell division, at 'Ser-228'.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR203721