OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MG219090

Aurkc (NM_001080965) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aurkc (NM_001080965) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Aurkc
Synonyms:	AIE1; AIK3; ARK-3; IAK3; Stk13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG219090 representing NM_001080965
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTTATCAGCTGGGATCTACGAGACTGCCAAAGCGCAATCTGGAAACCTCTTGAGTGCGGCAGTGCTA
GTGGATTACCAGTGTGTGTGTCCCGTGTGTCCCTGGCTACTGGCCAGATGGAGCCCAGCACCTCAACCAG
GAAGCATTTCACCATCAATGACTTTGAAATCGGGCGTCCTCTGGGCAGGGGGAAATTTGGGCGTGTGTAC
TTGGCTCGGCTCAAGGAAAATCATTTCATCGTGGCCCTGAAGGTCCTCTTCAAGTCTGAGATAGAGAAGG
AGGGATTGGAGCACCAACTTCGCAGGGAAGTGGAGATCCAGGCACACCTACAACACCGGAACATCCTTCG
CCTGTACAACTACTTCTATGATGACACTCGGATATACTTAATTCTGGAGTATGCTCCAGGAGGAGAGCTC
TATAAGGAGCTTCAGAGACATCAGAAGTTGGACCAGCAGCGTACAGCCACGATAATACAGGAGTTGTCAG
ATGCCCTGACCTACTGCCATGAGAAGAAGGTGATTCACAGGGACATCAAGCCAGAGAATCTCCTGCTGGG
CCTCAATGGTGAGGTGAAGATCTCAGACTTTGGGTGGTCTGTGCATACCCCCTCTCTCAGGAGAAAGACA
ATGTGTGGGACTCTGGACTACTTGCCCCCGGAAATGATAGCGCAGAAACCGTACAATGAGATGGTTGATC
TGTGGTGCATTGGGGTGCTCTGCTATGAGCTGCTGGTGGGGAAGCCACCCTTTGAGAGCAGCACCTCCAG
TGAGACATACAGACGCATCCGCCAGGTGGATTTTAAGTTTCCTTCATCAGTACCTGCAGGAGCCCAGGAC
TTGATCTCCAAGCTTCTTAGGTACCATCCTTCAGAGCGGCTGAGCCTGGCCCAGGTCCTGAAGCACCCCT
GGGTCAGGGAACACTCTCGAAGGGTGCTTCCTTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

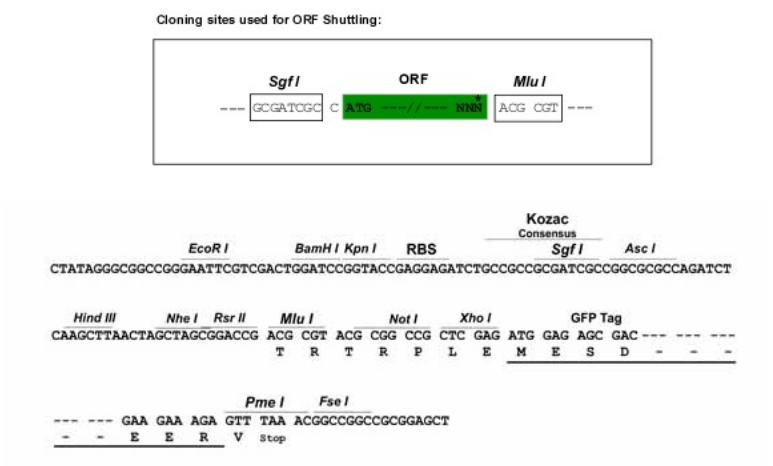
>MG219090 representing NM_001080965
Red=Cloning site Green=Tags(s)

MVISWDLRDCQSAIWKPLECGSASGLPVCVSRVSLATGQMEPSTSTRKHFTINDFEIGRPLGRGKFGRVY
LARLKENHFIVALKVLFKSEIEKEGLEHQLRREVEIQAHLQHRNILRLYNYFYDDTRIYLILEYAPGGEL
YKELQRHQKLDQQRTATIIQELSDALTYCHEKKVIHRDIKPENLLLGLNGEVKISDFGWSVHTPSLRRKT
MCGTLDYLPPEMIAQKPYNEMVDLWCIGVLCYELLVGKPPFESSTSSETYRRIRQVDFKFPSSVPAGAQD
LISKLLRYHPSERLSLAQVLKHPWVREHSRRVLPC

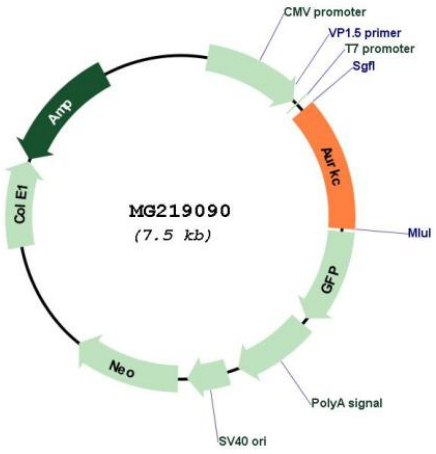
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001080965

ORF Size: 945 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_001080965.1, NP_001074434.1
RefSeq Size:	1168 bp
RefSeq ORF:	948 bp
Locus ID:	20871
Cytogenetics:	7 4.06 cM
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]