

Product datasheet for RC240047

GAK (NM_001286833) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: GAK (NM_001286833) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: GAK
Synonyms: DNAJ26; DNAJC26
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC240047 representing NM_001286833
 Red=Cloning site Blue=ORF Green=Tags(s)

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 GCCGCGATCGCC

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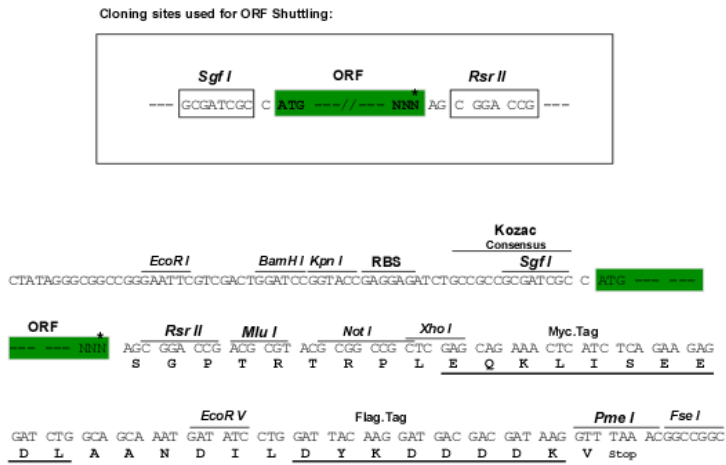
Protein Sequence: >RC240047 representing NM_001286833
 Red=Cloning site Green=Tags(s)

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RNTTTPMYRTPEI IDLYSNFPIGEKQDIWALGCILYLLCFRQHPFEDGAKLRIVNGAMLQVNPEERLSIAE
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SPAPPLSVQSTPRGGPPAAADPF GPLL PSSGNNSQPCSNPDLFGEFLNSDSVTVPPSFPSAHSAPPPSCS
ADFLHLGDLPGEPSKMTASSNPDLLGGAAWTETAASAVAPTATEGPLFSPGGQPAPCGSQASWTKSQ
NPDPFADLGDLSGLQGSPAGFP PGGFIPKATATPKGSSSQTSRPPAQGASWPPQAKPPPKACTQPRPN
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KLLDWIEGKERNIRALLSTLHTVLWDGESRWPVGMADLVAPEQVKKHYRRAVLAVHPDKAAGQPYEQHA
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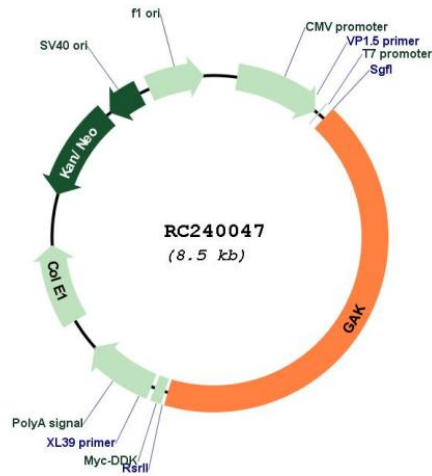
Restriction Sites: SgfI-RsrII

Cloning Scheme:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001286833

ORF Size: 3639 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_001286833.1](#), [NP_001273762.1](#)

RefSeq Size: 4240 bp

RefSeq ORF: 3642 bp

Locus ID: 2580

Cytogenetics: 4p16.3

Protein Families: Druggable Genome, Protein Kinase

MW: 132.6 kDa

Gene Summary: In all eukaryotes, the cell cycle is governed by cyclin-dependent protein kinases (CDKs), whose activities are regulated by cyclins and CDK inhibitors in a diverse array of mechanisms that involve the control of phosphorylation and dephosphorylation of Ser, Thr or Tyr residues. Cyclins are molecules that possess a consensus domain called the 'cyclin box.' In mammalian cells, 9 cyclin species have been identified, and they are referred to as cyclins A through I. Cyclin G is a direct transcriptional target of the p53 tumor suppressor gene product and thus functions downstream of p53. GAK is an association partner of cyclin G and CDK5. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 2015]