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Product datasheet for RC223572

GAK (NM_005255) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GAK (NM_005255) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GAK
Synonyms:	DNAJ26; DNAJC26
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

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>RC223572 representing NM_005255
Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>RC223572 representing NM_005255
Red=Cloning site Green=Tags(s)

MSLLQSALDFLAGPGSLGGASGRDQSDFVGQTVELGELRLRVRRVLAEGGFAFVYEAQDVGSGREYALKR
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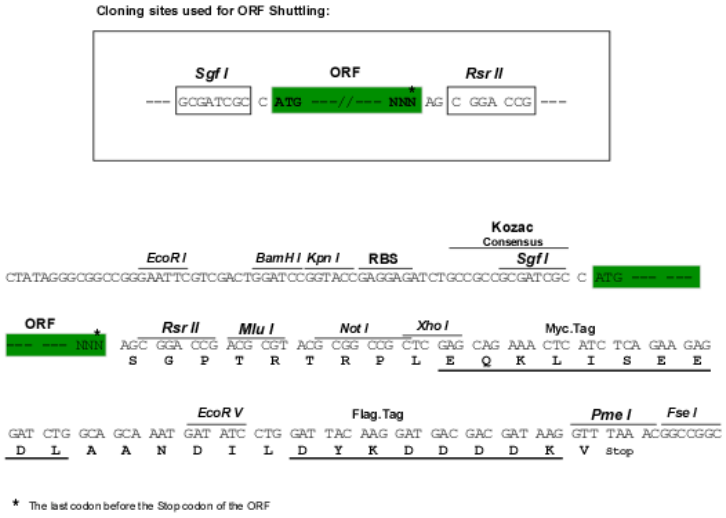
Chromatograms: https://cdn.origene.com/chromatograms/mg2658_e01.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_005255

ORF Size: 3933 bp

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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_005255.4
RefSeq Size:	4331 bp
RefSeq ORF:	3936 bp
Locus ID:	2580
UniProt ID:	O14976
Cytogenetics:	4p16.3
Domains:	pkinase, TyrKc, DnaJ, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
MW:	143 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]

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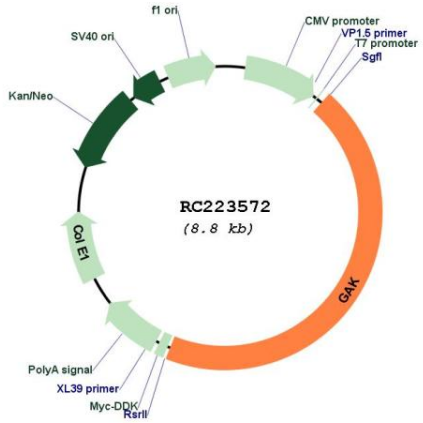
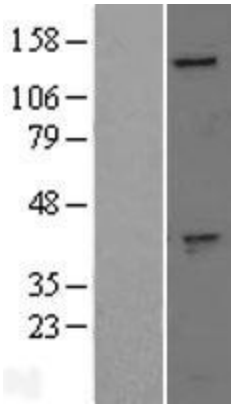
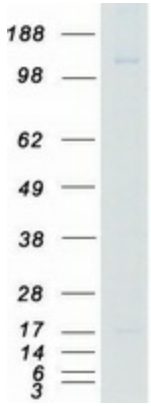
Product images:



Circular map for RC223572



Western blot validation of overexpression lysate (Cat# [LY401616]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223572 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GAK protein (Cat# [TP323572]). The protein was produced from HEK293T cells transfected with GAK cDNA clone (Cat# RC223572) using MegaTran 2.0 (Cat# [TT210002]).

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