PRODUCT INFORMATION

Catalog number ATGD0065

Product type cDNA

Species Human

NCBI Accession No. NP_000849.1

Alternative Names Guanylate kinase, GMK, GMP kinase, GMPK

mRNA Refseq NM_000858.5

OMIM 139270

Chromosome location 1q32-q41

PRODUCT SPECIFICATION

Formulation Lyophilized

Storage Store the plasmid at -20C.

cDNA Size 594bp

Preparation before usage

Centrifuge at 7000rpm for 1 minute.
Carefully open the vial and add 100ul of sterile water to dissolve the DNA.
Each tube contains approximately 10ug of lyophilized plasmid.

Vector description

This shuttle vector contains the complete ORF. It is inseted BamH I to Xho I. The gene insert contains multiple cloning sites which can be used to easily cut and transfer the gene and recombination site into your expression vector.

Cloning Vector

pATGen (puc19-derived cloning vector)

General Description



GuK1, also known as GMK, belongs to the guanylate kinase family. This protein exists as a monomer that catalyzes the ATP-dependent conversion of GMP to GDP, thereby playing an essential role in the recycling of GMP. Via its catalytic activity, GuK1 is thought to participate in regulating the supply of guanine nucleotides to signal transduction pathways. Overexpression of GuK1 is associated with pituitary adenocarcinomas, suggesting that GuK1 is involved in tumorigenesis.

DATA

Sequence nucleotides

ATGTCGGGCC CCAGGCCTGT GGTGCTGAGC GGGCCTTCGG GAGCTGGGAA GAGCACCCTG CTGAAGAGGC TGCTCCAGGA GCACAGCGGC ATCTTTGGCT TCAGCGTGTC CCATACCACG AGGAACCCGA GGCCCGGCGA GGAGAACGGC AAAGATTACT ACTTTGTAAC CAGGGAGGTG ATGCAGCGTG ACATAGCAGC CGGCGACTTC ATCGAGCATG CCGAGTTCTC GGGGAACCTG TATGGCACGA GCAAGGTGGC GGTGCAGGCC GTGCAGGCCA TGAACCGCAT CTGTGTGCTG GACGTGGACC TGCAGGGTGT GCGGAACATC AAGGCCACCG ATCTGCGGCC CATCTACATC TCTGTGCAGC CGCCTTCACT GCACGTGCTG GAGCAGCGGC TGCGGCAGCG CAACACTGAA ACCGAGGAGA GCCTGGTGAA GCGGCTGGCT GCTGCCCAGG CCGACATGGA GAGCAGCAAG GAGCCCGGCC TGTTTGATGT GGTCATCATT AACGACAGCC TGGACCAGGC CTACGCAGAG CTGAAGGAGG CGCTCTCTGA GGAAATCAAG AAAGCTCAAA GGACCGGCCGC CTGA

Transaction Sequence

MSGPRPVVLS GPSGAGKSTL LKRLLQEHSG IFGFSVSHTT RNPRPGEENG KDYYFVTREV MQRDIAAGDF IEHAEFSGNL YGTSKVAVQA VQAMNRICVL DVDLQGVRNI KATDLRPIYI SVQPPSLHVL EQRLRQRNTE TEESLVKRLA AAQADMESSK EPGLFDVVII NDSLDQAYAE LKEALSEEIK KAQRTGA