

Product datasheet for RC235185

PASK (NM_001252124) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PASK (NM_001252124) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PASK
Synonyms:	PASKIN; STK37
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC235185 representing NM_001252124 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGGACGGGGCTTAACAGCCTTTGAAGAGGACCAGAGATGCCTTTCCAGAGCCTCCCCTTGCCAG
TGTCAGCAGAGGGCCAGCTGCACAGACCCTGCTGAGCCAGCAGGTCGTTTTCCCTCAGCCACAGACA
CCTGAGCAGAAGGAATGGGCTTTCCAGACTCTGCCAGAGCAGGACAGCGCTCTCTGAAGACAGATGGAGC
TCCTATTGTCTATCACTACTGGCTGCCAGAATATTTGTACAAGTAAACTGCACTGCCCTGCTGCCCTG
AGCACACGGACCCGTCGGAACCGCGGGCAGTGTGTCCTGCTGCTCCCTGCTGCGGGGACTGTCCTCAGG
GTGGTCTCACCTCTGCTTCCGGCCCTGTGTGCAACCCTAACAAAGGCCATCTTCACGGTGGATGCCAAG
ACCACAGAGATCCTGGTTGCTAACGACAAAAGCTTGCAGGCTCCTGGGTACAGCAGCCAGGACCTGATTG
GCCAGAAGCTCACGCAGTCTTTCTGAGGTCAGATTCTGATGTGGTGGAGGCCCTCAGCGAGGAGCACAT
GGAGGCCGACGGCCACGCTGCGGTGGTGTGGCACGGTGGTGGACATCATCAGCCGTAGTGGGGAGAAG
ATTCAGTGTCTGTGGATGAAGAGGATGCGGCAGGAGCGCCGCTATGCTGCGTGGTGGTCTGGAGC
CGGTGGAGAGGGTCTCGACCTGGGTCGCTTTCCAGAGCGATGGCACCGTACGTCATGTGACAGTCTCTT
TGCTCATCTTCACGGGTACGTGTCTGGGAGGAGTGGCTGGGCAGCATATCACAGACCTGATCCCTTCT
GTGCAGCTCCCTCCTTCTGGCCAGCACATCCCAAAGAATCTCAAGATTACAGAGTCTGTTGGAAGAGCCA
GGGACGGTACCACCTTCCCTCTGAGCTTAAAGCTGAAATCCCAACCCAGCAGCGAGGAGGCGACCACCGG
TGAGGGCGCCCTGTGAGCGGCTACCGGCATCTGTCTGGGTGTTCTGCACCATCAGTGGCTCATCACC
CTCCTGCCGATGGGACCATCCACGGCATCAACCACAGCTTCGCGCTGACACTGTTTGGTACGGAAAGA
CGGAGCTCCTGGCAAGAATATCACTTTCTGATTCTCTGGTTTCTACAGCTACATGGACCTTGCCTACAA
CAGCTCATTACAGCTCCCAGACCTGGCCAGCTGCCTGGACGTCGCAATGAGAGTGGTGTGGGGAGAGA
ACCTTGGACCCGTGGCAGGGCCAGGACCAGCTGAGGGGGCCAGGATCAAGGATTAATGTCGTGCTTG
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TCAGACTGAGCTGATTGCTGGAGGCCAGCTCCTTTCTGCCTCTCACCTCAGCCTGCTCCAGGGGTGGAC
AATGTCCCAAGGAAGCCTGCCAGTGCAGGTTAACAGGCGCTGCCAAGGACCAGCAAATCACTGCCT



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TGGGGAGAGAGGAACCTGTGGCAATAGAGAGCCCCGGACAGGATCTTCTGGGAGAAAGCAGGTCTGAACC
 AGTGGATGTGAAGCCATTTGCTTCTGCGAAGATTCTGAAGCTCCAGTCCCAGCTGAGGATGGGGGCAGT
 GATGCTGGCATGTGTGGCCTGTGTGAGAAGGCCAGCTAGAGCGGATGGGAGTCAGTGGTCCCAGCGGT
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 ACAGCCAACGCGACTCAGCCGCCAGGACCCGCCTGTTCTTGGCAGCCTGCCCGGCTCCACCCACTCTAC
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 CGCTGGGACGTGGGGCTTCCGCTTGTGTGGACTGCTGTGGACAAGGAAAAACAAGGAGGTGGTGGT
 GAAGTTTATTAAGAAGGAGAAGGTGGAGGATTGGATTGAGGATCCCAAACCTGGGAAAGTTACT
 TTAGAGATCGCAATTCTATCCAGGGTGGAGCACGCCAATATCATCAAGGATTGGATATATTTGAAAAC
 AAGGGTCTTCCAGCTTGTGATGGAGAAGCACGGCTCCGCTCAGACCTTTCGCTTTCATCGACGCCCA
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC235185 representing NM_001252124
 Red=Cloning site Green=Tags(s)

MEDGGLTAFEEDQRCLSQLPLVSAEGPAAQTAEPSRSFSSAHRHLRRNGLSRLCQSRTALSEDRWS
 SYCLSSLAANICTSKLHCPAAPEHTDPSEPRGSVSCSLLRGLSSGWSSPLLPAVPCNPNAIFTVDAK
 TTEILVANDKACGLLGYSSQDLIGQKLTQFFLRSDSDVVEALSEEHMEADGHAAVVFGTVVDIIISRSGEK
 IPVSVWMMKMRQERRLCCVVVLEPVERVSTWVAFQSDGVTSCDSLFAHLHGYVSGEDVAGQHITDLIPS
 VQLPPSQGHIPKLNKIQRSVGRARDGTTFPLSLKLSQPSSEEATTGEAAPVSGYRASVWVFTISGLIT
 LLPDGTIHGINHSFALTLFGYGKTELLGKNITFLIPGFYSYMDLAYNSSLQLPDLASCLDVGNESGCGER
 TLDPWQGDPAEGGQDPRINVVLAGGHVVRDEIRKLMESQDIFTGTQTELIAGGQLSCLSPQPAPGVD
 NVPEGSLPVHGEQALPKDQQITAGREEPVAIESPGQDLLGESRSEPVDVKPFASCEDSEAPVPAEDGGS
 DAGMCGLCQKAQLERMVSGPSGSDLWAGAAVAKPQAKGQLAGGSLLMHCPCYGEWGLWWRSDLAPSP
 SGMAGLSFGTPTLDEPWLGVENDREELQTCLIKEQLSQLSLAGALDVPHAEVPTTECQAVTAPVSSCDLG
 GRDLCGGCTGSSSACYALATDLPGGLEAVEAQEVDVNSFSWNLKELFFSDQTDQTSNCSCATSELRETP
 SSLAVGSDPDVGSLEQEGSCVLDRELLLLTGTCDVLDGQRRRFRESCVGHDPTEPLEVCLVSEHYAASD
 RESPGHVPSTLDAGPEDTCSAEPRNLNVQVTSTPVIVMRGAAGLQREIQEGAYSQYHRDGLRLSIQF
 EVRRVELQGPTPLFCWLVKDLLHSQRDAAARTRFLASLPGSTHSTAELTGPSLVEVLRARPWFEEPP
 KAVELEGLAACEGEYSQYKSTMSPLGSGAFGFVWTAVDKEKNKEVVVKFKKKEKVLKEDCWIEDPKLGKVT
 LEIAILSRVEHANIIVKLDIFENQGFQLVMEKHGSLDLFAFIDRHPRLDEPLASYIFRQVRAGQSRVS
 VNAGLGAWVRWLQRSVIHTRFSL

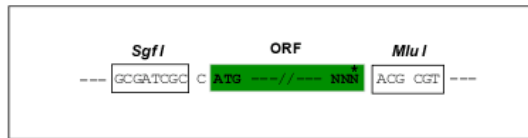
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

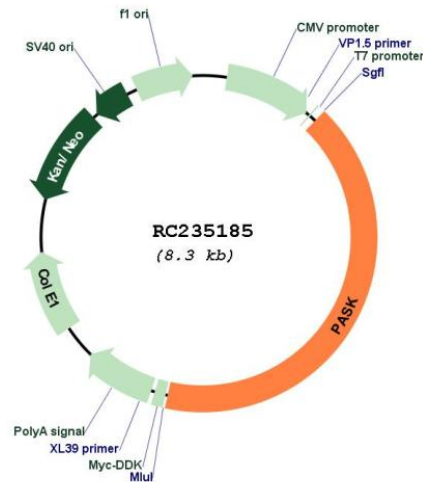
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001252124

ORF Size: 3429 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_001252124.2](#)

RefSeq Size: 4882 bp

RefSeq ORF: 3432 bp

Locus ID: 23178

UniProt ID: [Q96RG2](#)

Cytogenetics: 2q37.3

Protein Families: Druggable Genome, Protein Kinase, Stem cell - Pluripotency

MW: 123.5 kDa

Gene Summary: This gene encodes a member of the serine/threonine kinase family that contains two PAS domains. Expression of this gene is regulated by glucose, and the encoded protein plays a role in the regulation of insulin gene expression. Downregulation of this gene may play a role in type 2 diabetes. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Nov 2011]