

Product datasheet for **RG235185**

PASK (NM_001252124) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PASK (NM_001252124) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PASK
Synonyms:	PASKIN; STK37
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG235185 representing NM_001252124 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGACGGGGCTTAACAGCCTTTGAAGAGGACCAGAGATGCCTTTCCAGAGCCTCCCCTTGCCAG
TGTCAGCAGAGGGCCAGCTGCACAGACCAGTCTGAGCCAGCAGGTCGTTTTCTCAGCCACAGACA
CCTGAGCAGAAGGAATGGGCTTTCCAGACTCTGCCAGAGCAGGACAGCGCTCTGAAGACAGATGGAGC
TCCTATTGTCTATCACTGGCTGCCAGAATATTTGTACAAGTAACTGCACTGCCCTGCTGCCCTG
AGCACACGGACCCGTCCGAACCGGGGCAGTGTGTCCTGCTGCCCTGCTGCGGGGACTGTCTCAGG
GTGGTCTCACCTCTGTTCCGGCCCTGTGTGCAACCCTAACAAGGCCATCTTACGGTGGATGCCAAG
ACCACAGAGATCCTGGTTGCTAACGACAAAGCTTGCAGGGCTCCTGGGGTACAGCAGCCAGGACCTGATTG
GCCAGAAGCTCACGCAGTTCTTTCTGAGGTCAGATTCTGATGTGGTGGAGGCCCTCAGCGAGGAGCAT
GGAGGCCGACGGCCACGCTGCGGTGGTGTGGTGGCAGGTCAGCATCAGCCGTAGTGGGGAGAAG
ATTCCAGTGTCTGTGGATGAAGAGGATGCGGCAGGAGCGCCGCTATGCTGCGTGGTGGTCTGGAGC
CCGTGGAGAGGGTCTCGACCTGGTCTGCTTTCCAGAGCGATGGCACCGTCACGTCATGTGACAGTCTTT
TGCTCATCTTACGGGTACGTGTCTGGGAGGACGTGGCTGGGAGCATATCACAGACCTGATCCCTTCT
GTGCAGTCCCTCCTTGGCCAGCACATCCCAAGAATCTCAAGATTCAGAGGTCGTTGGAAGAGCCA
GGGACGGTACCACCTTCCCTCTGAGCTTAAAGCTGAAATCCCAACCCAGCAGCGAGGAGGCCACCCGG
TGAGGCGGCCCTGTGAGCGGCTACCGGCATCTGTCTGGGTGTTCTGCACCATCAGTGGCCTCATCACC
CTCCTGCCGATGGGACCATCCACGGCATCAACCACAGCTTCGCGCTGACACTGTTGGTTACGGAAGA
CGGAGCTCCTGGCAAGAATATCACTTTCTGATTCTGGTTTCTACAGCTACATGGACCTTGCGTACAA
CAGCTCATTACAGCTCCCAGACCTGGCCAGCTGCCTGGACGTGGCAATGAGAGTGGGTGTGGGAGAGA
ACCTTGGACCCGTGGCAGGGCCAGGACCCAGCTGAGGGGGCCAGGATCCAAGGATTAATGTCGTGCTTG
CTGGTGGCCACGTTGTGCCCGAGATGAGATCCGGAAGCTGATGGAAGCCAAGACATCTTACCCGGAC
TCAGACTGAGCTGATTGTGGAGGCCAGCTCCTTCTGCCTCTCACCTCAGCCTGCTCCAGGGTGGAC



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AATGTCCCAGAAGGAAGCCTGCCAGTGCACGGTGAACAGGCGCTGCCAAGGACCAGCAAATCACTGCCT
 TGGGGAGAGAGGAACCTGTGGCAATAGAGAGCCCCGGACAGGATCTTCTGGGAGAAAAGCAGGTCTGAACC
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 TTAGAGATCGCAATTCTATCCAGGGTGGAGCACGCCAATATCATCAAGGATTGGATATATTTGAAAACC
 AAGGGTCTTCCAGCTTGTGATGGAGAAGCAGGCTCCGGCTAGACCTTTCGCTTTCATCGACCGCCA
 CCCCAGGCTGGATGAGCCCTGGCGAGCTACATCTCCGACAAGTGAAGCAGGCCAGAGCCGTGTAGT
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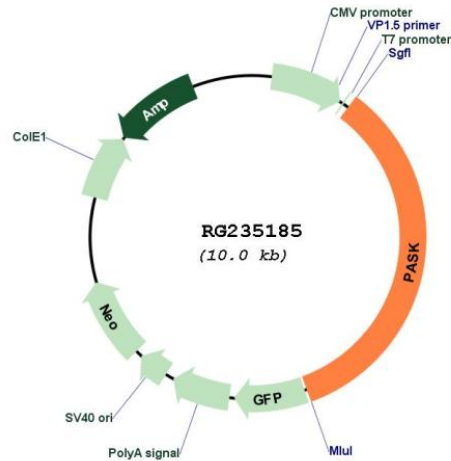
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG235185 representing NM_001252124
 Red=Cloning site Green=Tags(s)

MEDGGLTAFEEDQRCLSQLPLPVS AEGPAAQTAEPSRSFSSAHRHLSRRNGLSRLCQSRTALSEDRWS
 SYCLSSLAANICTSKLHCPAAPEHTDPSEPRGSVSCSLLRGLSSGWSSPLLPAPVCNPNKAIFTVDAK
 TTEILVANDKACGLLGYSSQDLIGQKLTQFFLRSDSDVVEALSEEHMEADGHAAVVFGTVVDIIISRSGEK
 IPVSVWMMKMRQERRLCCVVVLEPVERVSTWVAFQSDGVTSCDSLFAHLHGYVSGEDVAGQHITDLIPS
 VQLPPSQGHIPKNLKIQRSVGRARDGTTFPLSLKLSQPSSEEATTGEAAPVSGYRASVWVFTISGLIT
 LLPDGTIHGINHSFALTLFGYGKTELLGKNITFLIPGFYSYMDLAYNSSLQLPDLASCLDVGNESGCGER
 TLDPWQGDPAEGGQDPRINVVLAGGHVVRDEIRKLMESQDIFTGTQTELIAGGQLLSCLSPQPAPGVD
 NVPEGLSPVHGEQALPKDQQITAGREEPVAIESPGQDLLGESRSEPVDVKPFASCEDSEAPVPAEDGGS
 DAGMCGLCQKAQLERMVSGPSGSDLWAGAAVAKPQAKGQLAGGSLLMHCPCYGSEWGLWWRSDLAPSP
 SGMAGLSFGTPTLDEPWLGVENDREELQTCLIKEQLSQLSLAGALDVPHAEVPTTECQAVTAPVSSCDLG
 GRDLGGCTGSSSACYALATDLPGGLEAVEAQEVDVNSFSWNLKELFFSDQTDQTSNCSCATSELRETP
 SSLAVGSDPDVGSLEQEGSCVLDREL LLLTGTCTVDLGGRRFRFRESVGHDPTEPLEVCLVSEHYAASD
 RESPGHVPSTLDAGPEDTCSAEPRNLNVQVTSTPVIVMRGAAGLQREIQEGAYS GSCYHRDGLRLSIQF
 EVRRVELQGPTPLFCWLVKDLLHSQRDSAARTRFLASLPGSTHSTAELTGPSLVEVLRARPWFEEPP
 KAVELEGLAACEGEYSQYSTMSPGSGAFGFVWTAVDKEKNKEVVVKFKKEKVLVEDCWIEDPKLGKVT
 LEIAILSRVEHANI IKVLDIFENQGFQLVMEKHGSLDLFAFIDRHPRLDEPLASYIFRQVRAGQSRVS
 VNAGLGAWVRWLQRSVIHTRFSL

TRTRPLE – GFP Tag – V

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

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]