

Product datasheet for SC306006

PANK1 (NM_138316) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PANK1 (NM_138316) Human Untagged Clone
Tag:	Tag Free
Symbol:	PANK1
Synonyms:	PANK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC306006 representing NM_138316. Blue=Insert sequence Red=Cloning site Green=Tag(s)

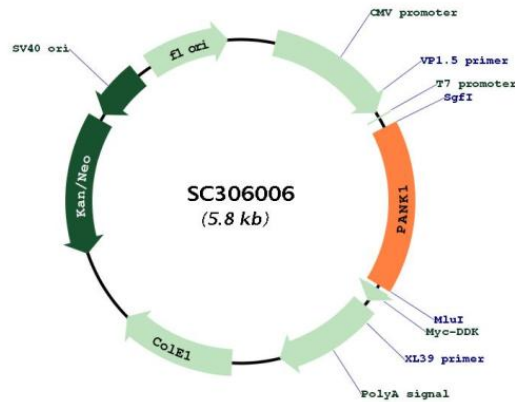
```
GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAAGCTTATAAATGGCAAAAAGCAAACATTC CATGGTTTGGCATGGACATCGGTGGAACGCTGGTT
AAATTGGTGTATTTTCGAGCCGAAGGATATTACAGCCGAAGAGGAGCAAGAGGAAGTGGAGAACCTGAAG
AGCATCCGGAAGTATTTGACTTCTAATACTGCTTATGGGAAAAC TGGATCCGAGACGTCCACCTGGAA
CTGAAAAACCTGACCATGTGTGGACGCAAAGGAACTGCACTTCATCCGCTTTCCAGCTGTGCTATG
CACAGTTTCATT CAGATGGCAGCGAGAAGA AACTTCTCTAGCCTTCACACCACCCTCTGTGCCACAGGA
GGCGGGGCTTTCAAATTCGAAGAGGACTTCAGAATGATTGCTGACCTGCAGCTGCATAAACTGGATGAA
CTGGACTGTCTGATT CAGGGCCTGCTTTATGTCGACTCTGTTGGCTTCAACGGCAAGCCAGAATGTTAC
TATTTTAAAAATCCCACAAATCCTGAATTTGTGTCAAAAAAGCCG TACTGCCTTGATAACCCATACCCCT
ATGTTGCTGGTTAACATGGGCTCAGGTGT CAGCATTCTAGCCGTG TACTCCAAGGACAACATAAAAAGA
GTTACAGGGACCAGCTTTGGCAACATGATGAGTAAAGAAAAGCGAGATTC CATCAGCAAGGAAGACCTC
GCCCGGGCCACATTGGTCACCATCACCAACAACATTGGCTCCATTGCTCGGATGTGCGGTTGAATGAG
AACATAGACAGAGTTGTGTTTGTGGAAATTTTCTCAGAATCAATATGGTCTCCATGAAGCTGCTGGCA
TATGCCATGGATTTTGGTCCAAAGGACAAC TAAAGCTCTGTTTTTGGAAACATGAGGGTTATTTTGGG
GCCGTTGGGGCACTGTTGGAAGTTC AAAATGACTGATGACAAGTAG
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: SgfI-MluI



[View online »](#)

Plasmid Map:



ACCN: NM_138316

Insert Size: 945 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_138316.3](#)

RefSeq Size: 6021 bp

RefSeq ORF: 945 bp

Locus ID:	53354
UniProt ID:	Q8TE04
Cytogenetics:	10q23.31
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Pantothenate and CoA biosynthesis
MW:	35.6 kDa

Gene Summary: This gene encodes a member of the pantothenate kinase family. Pantothenate kinases are key regulatory enzymes in the biosynthesis of coenzyme A (CoA). The encoded protein catalyzes the first and rate-limiting enzymatic reaction in CoA biosynthesis and is regulated by CoA through feedback inhibition. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. This gene and an intronic miRNA on the same strand are co-regulated by the tumor suppressor p53 (see PMID 20833636). [provided by RefSeq, Apr 2011]

Transcript Variant: This variant (gamma) differs in the 5' UTR, lacks a portion of the 5' coding region and an internal coding exon, and initiates translation at an alternate start codon, compared to variant alpha. The encoded isoform (gamma) has a distinct N-terminus and is shorter than isoform alpha. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.