

## Product datasheet for **SC306350**

### **PANK1 (NM\_148978) Human Untagged Clone**

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | PANK1 (NM_148978) 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:      | >SC306350 representing NM_148978.<br>Blue=Insert sequence Red=Cloning site Green=Tag(s) |

```
GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAAGCTTATAAATGGCAAAAAGCAAACATTCATGTTTGGCATGGACATCGGTGGAACGCTGGTT
AAATTGGTGTATTTTCGAGCCGAAGGATATTACAGCCGAAGAGGAGCAAGAGGAAGTGGAGAACCTGAAG
AGCATCCGGAAGTATTTGACTTCTAATACTGCTTATGGGAAAACCTGGGATCCGAGACGTCCACCTGGAA
CTGAAAAACCTGACCATGTGTGGACGCAAAGGAACTGCACTTCATCCGCTTTCCAGCTGTGCTATG
CACAGGTTCAATCAGATGGCAGCGAGAAGAATTCTTAGCCTTCACACCACCCTCTGTGCCACAGGA
GGCGGGGCTTTCAAATTCGAAGAGGACTTCAGAATGATTGCTGACCTGCAGCTGCATAAACTGGATGAA
CTGGACTGTCTGATTAGGGCCTGCTTTATGTCGACTCTGTTGGCTTCAACGGCAAGCCAGAATGTTAC
TATTTTAAAAATCCACAAATCCTGAATTGTGTCAAAAAAGCCGTAAGCTTGCCTTGATAACCCATACCCCT
ATGTTGCTGGTTAACATGGGCTCAGGTGTGAGCATTCTAGCCGTGTAAGCAAGGACAATAAAAAAGA
GTTACAGGGACCAGTCTTGGAGGTGGAACATTCCTAGGCCATGTTGCTTGTGACTGGTTGTGAGACC
TTTGAAGAAGCTCTGAAATGGCAGCTAAAGGCGACAGCACCAATGTTGATAAACTGGTGAAGGACATT
TACGGAGGAGACTATGAACGATTTGGCCTTCAAGGATCTGCTGTAGCATCAAGCTTTGGCAACATGATG
AGTAAAGAAAAGCGAGATTCCATCAGCAAGGAAGACCTCGCCCGGCCACATTGGTCACCATCACCAAC
AACATTGGCTCCATTGCTCGGATGTGCGGTTGAATGAGAACATAGACAGAGTTGTTTGGTGGAAAT
TTTCTCAGAATCAATATGGTCTCCATGAAGCTGCTGGCATATGCCATGGATTTTGGTCCAAGGACAA
CTGAAAGCTCTGTTTTTGAACATGAGGGTTATTTTGGAGCCGTTGGGGCACTGTTGGAAGTGTTCAAA
ATGACTGATGACAAGTAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: SgfI-MluI



[View online »](#)

|                        |   |
|------------------------|---|
| Plasmid Map:           | □   |
| ACCN:                  | NM_148978   |
| Insert Size:           | 1122 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: | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol> |
| RefSeq:                | <a href="#">NM_148978.2</a>   |
| RefSeq Size:           | 6198 bp   |
| RefSeq ORF:            | 1122 bp   |
| Locus ID:              | 53354   |
| UniProt ID:            | <a href="#">Q8TE04</a>  |
| Cytogenetics:          | 10q23.31  |
| Protein Families:      | Druggable Genome  |
| Protein Pathways:      | Metabolic pathways, Pantothenate and CoA biosynthesis   |
| MW:                    | 41.7 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 (beta) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at an alternate start codon, compared to variant alpha. The encoded isoform (beta) has a distinct N-terminus and is shorter than isoform alpha. **Sequence Note:** This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.