

Product datasheet for **MR210816**

Pank4 (BC050089) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pank4 (BC050089) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pank4
Synonyms:	D030031112Rik; R75150
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR210816 representing BC050089
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGAGCGTGGAGCGAGTGGCGCGGGAGCGGGGACAGTCTGGACAAGAGCATCACGCTGCCCC
 CCGACGAGATCTCCGCAACCTGGAGAACGCCAAGCGCTTCGCCATTGATATAGGTGGATCATTGACCAA
 GTTGGCATACTATTCCACCGTACAGCACAAAGTGGCCAAAGTGGATCTTTTGACCACCCGGAAAGGAC
 GTGGAGCAGGATCATGAGCCACCCTATGAGACCTCAGTCCAGGAGGAGATCACAGCTCGCCTGCATTTC
 TCAAGTTTGAGAACTACATGGAAGCCTGCCTGGACTTCATCAGAGACCACCTAGTCAACACTGAGAC
 CAAGGTCCAGGCCACTGGGGTGGAGCCTACAAGTCAAGGACCTCATCGAGGAGAAGCTGCGTCTG
 AAGGTGGACAAAGAGGGTGAATGACCTGCTTGATTAAGGGTCAACTTCGTGCTGAAGAACATCCCGC
 ATGAGGCCTTCATGTACCAGAAAGACTCAGACCCAGAGTTTCGATTTAGACAAAACACCCCAACATCTT
 CCCCTACCTCCTAGTCAACATTGGCTCTGGCGTCTCCATCGTGAAGGTGGAGATAGAGGACCGGTTTGAG
 TGGATTGGTGAAGCTCCATTGGAGGAGGCACCTTCTGGGGCCTCGGGGCTCTGCTCACCAAAAACAAGA
 AGTTTGATGAGCTGCTGCAGCTGGCTTTCAGAGGCCGGCATGCCAACGTTGACATGCTGGTCCAGGACAT
 CTATGGTGGGGCCACCAGACCTGGGCCTGAGTGGCAATCTCATCGAAGCAGTTTTGGGAAGTCAGCC
 ACTGCTGACAGAGAGTTCTCAAAGAAGACATGGCCAAGAGCCTGCTGCACATGATCAGCAATGACATCG
 GGCAGCTCGCCTGTGTACGCCAAGCTCCACGGCTTGGACAGGGTCTACTTTGGGGCTTCTTCATCCG
 GGGTACCCCGTGACCATGCGCACAAATCACCTACAGCATTAACTTCTTCTCAAGGGTGAAGTCCAGGCA
 CCCTTCTGAGACATGAAGGCTACCTGGGAGCCATCGGGCATTTTTAAAAGGAGCCGAGCAAGACAATC
 CTAAACAGTACAGCTGGGGTGAAGACTACGACCCAGCTCCGGGCTGATGAGCAGCTCGCCGAGCTGTG
 CCGGACACAGCGGCAAGGAGCGGCACATTTGACCTGCTGGAAATGGACCGGCTGGAGAGGCCCTGGTC
 AACCTGCCCTCCTCCTGGACCGTCTCCTATGTGCCTGACACAGTAGACCTCACTGATGATGCTCTGG
 CCCGTCAGTACTGGCTCACGTGCTTTGAGGAGGCCCTGGATGGGGTGGTGAAGCGAGCTGTGGCCAGCCA
 GCCAGAGTCCATGGATGCAGTTGAGAGGGCAGAGAAAATCCGGCAGAAAATCTGGGGCAAATGCAGACC
 CTCCGGCACCAGCCCTTTGCTTATGGGACATTGACTGTGCGCAGCCTGTTGGACACAAGAGAACTGTT
 TGAATGAATCAACTCCAGATCCCTACTCCAAGGTGAAGCAGAAAGAAAACGGCCTCGCACTAAAATG
 CTTTCAGAGCGTGACGCGCTCGCTGGACTCACTAGGCTGGGAAGAGCGGCAGCTGGCCCTGGTGAAGGGG
 CTCTTAGCTGGGAATGTCTTTGACTGGGAGCCAAGGCTGTGTCTGATGTCTGGAATCGGACCCCACT
 TTGGGTTTGAAGAAGCAAAGAGAAAATTGCAAGAACGGCCCTGGCTCGTGGATTCTACACCAAGTGGCT
 CCAGAGGTTAAAGGGGCCCTCATAAATGTGCCTTAATTTTCGCAGATAACAGTGAAGTGAAGATCATT
 TTGGGAGTCTTCCCTTTGTGAGGGAGCTACTCTTTAGAGGGACAGAGGTCATCTTGGCATGCAACTCAG
 GCCCTGCCCTGAACGATGTGACCTACAGTGAGTCTCTCATTGTGGCAGAACGCATTGCAGCCATGGACCC
 CATCATCTGCACTGCTCTGAGAGAAGATAGGCTGCTGCTGGTGCAGACCGGTTCCAGCTCTCCATGCCTA
 GACCTCAGCTTGTGTACATCTCGGACAACAATGCATGGTTTTACCTTTTGCCATGTGGGTTCTGTGGA
 CCAAATCAAGTCAATGGTAGAAAAGTGCCTAAGCCATTGAGCATCTGCTGGCCTGTTCAAGTCTTTTC
 TGCAAAGAGCCGTAGACAAGGGACTGGCTGTGCTGGTGGGAGAGCGTGGTGGCCGACCTGGTCTGATC
 GAGGGAATGGGCCGTGCCATCCACACCAACTACCATGCATTGCTGCGCTGCGAGAGTCTGAAGTGGCAG
 TGGTAAAGAACGCTTGGCTGGCAGAGCGTCTAGGTGGCCAGCTCTCAGTGTCTCTCAAGTACGAGGT
 TCCTACCAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210816 representing BC050089
Red=Cloning site Green=Tags(s)

MAERGASGGGSGGDSLDKSITLPPDEIFRNLENKRFAIDIGGSLTKLAYYSTVQHKVAKVRSFDHPGKD
VEQDHEPPYETSQEEITARLHF IKFENTYMEACLD FIRDHLVNTETKVIQATGGGAYKFKDLIEEKLRL
KVDKEGVMTC LIKGCNFVLKNIPHEAFMYQKDSDFEFRTNHPNIFPYLLVNIIGSGVSIKVEIEDRFE
WIGGSSIGGGTFWGLGALLTKTKKFDELLQLAFRGRHANVDMLVQDIYGGAHQTLGLSGNLIASSFGKSA
TADREFSKEDMAKSL LHMSNDIGQLACL YAKLHGLDRVYFGGFFIRGHPVTMRTITYSINFFSKGEVQA
PFLRHEGYLGAIGAF LKGAEQDNPQYSWGENYAASSGLMSTPELCPTQRARSQTFD LLEMDRLERPLV
NLPLLLDPSSYV PDTVDLTDDALARQYWLTCFEEALDGVVKRAVASQPESMDAVERAEKFRQKYWGKLT
LRHQPFAYGTLTVRSLD TREHCLNEFNFPDPYSKYKQK ENGLALKCFQSVTRSLDSL GWEERQLALVKG
LLAGNVFDWGA KAVSDVLESDPQFGFEEAKRKLQERPWL VDSYTKWLQRLKGP PHKCALIFADNSGIDII
LGVFPFVRELLFRGTEVILACNSGPALNDVTYSESLIVAERIAAMDPIICTALREDRLLL VQTGSSSPCL
DLSLCTSR TTTTCMVLPFAMWV LTKLKS LVEKCL SPLSILLACSVLSAKSRLDKGLAVLVRER GADLVVI
EGMGRAIHTNYHALLRCE SLKLAVVKNAWLAERLGGQLFSVIFKYEVPTK

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9070_f07.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: BC050089

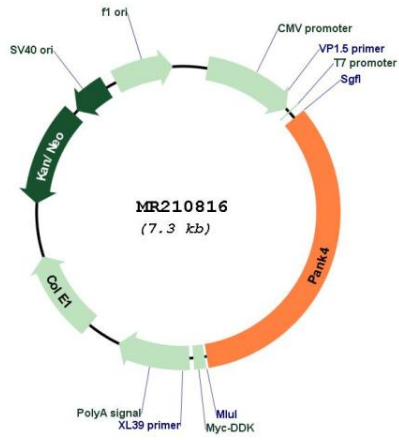
ORF Size: 2460 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<ol style="list-style-type: none">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:	BC050089.1
RefSeq Size:	2739 bp
RefSeq ORF:	2462 bp
Locus ID:	269614
Cytogenetics:	4 E2
MW:	91.5 kDa
Gene Summary:	Plays a role in the physiological regulation of the intracellular CoA concentration (By similarity). The phosphatase activity shows preference for normal or oxidatively damaged intermediates of 4'-phosphopantetheine, which provides strong indirect evidence that the phosphatase activity pre-empts damage in the CoA pathway (By similarity). Hydrolyzing excess 4'-phosphopantetheine could constitute a directed overflow mechanism to prevent its oxidation to the S-sulfonate, sulfonate, or other forms (By similarity). Hydrolyzing 4'-phosphopantetheine sulfonate or S-sulfonate would forestall their conversion to inactive forms of CoA and acyl carrier protein (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210816