

Product datasheet for **SC128296**

PI4KA (NM_002650) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PI4KA (NM_002650) Human Untagged Clone
Tag:	Tag Free
Symbol:	PI4KA
Synonyms:	PI4K-ALPHA; pi4K230; PIK4CA
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene ORF sequence for NM_002650 edited
ATGCGGGAGATGGCAGGGGCTGGCACATGACGGTGGAGCAGAAATTTGGCCTGTTTTCT
GCTGAGATAAAGGAAGCAGACCCCTGGCTGCCTCGGAAGCAAGTCAACCCAAACCTGT
CCCCCGAAGTGACCCCCACTACATCTGGATCGACTTCTGGTGCAGCGGTTTGAGATC
GCCAAGTACTGCAGCTCTGACCAAGTGGAGATCTTCTCCAGCCTGCTGCAGCGCTCCATG
TCCCTGAACATCGGCGGGGCCAAGGGGAGCATGAACCGGCACGTGGCGGCCATCGGGCCC
CGCTTCAAGCTGCTGACCTGGGGCTGCCCTCCTGCATGCCGATGTGGTTCCAAATGCA
ACCATCCGAATGTGCTTCGCGAGAAGATCTACTCCACTGCCTTTGACTACTTCAGCTGT
CCCCAAAGTTCCCTACTCAAGGAGAGAAGCGGCTGCGTGAAGACATAAGCATCATGATT
AAATTTTGGACCGCCATGTTCTCAGATAAAGAAGTACCTGACCGCCAGCCAGCTTGTTC
CCAGATAATCAGGACACCCGGAGCAACCTGGACATAACTGTGGCTCTCGGCAACAAGCC
ACCCAAGGCTGGATCAACACATAACCCCTGTCCAGCGGCATGTCCACCATCTCCAAGAA
TCAGGCATGTCTAAGAAAACCAACCGGGCTCCCAGCTGCACAAATACTACATGAAGCGC
AGGACGCTGCTGTCTGCTGGCCACTGAGATCGAGCGTCTCATCACATGGTACAAC
CCGCTGTAGCCCGGAAGTGGAACTAGACCAGCCGGAGAGAACAGCGTGGCCAACTGG
AGATCTAAGTACATCAGCCTGAGTGAGAAGCAGTGAAGGACAACGTGAACCTCGCCTGG
AGCATCTCTCCCTACCTAGCCGTGCAGCTGCCTGCCAGGTTTAAAGAACACAGAAGCCATT
GGGAACGAAGTGACCCGTCTCGTTTCGGTTGGACCCGGGAGCCGTTAGTGATGTGCCTGAA
GCAATCAAGTTCTCGGTACCTGGCACACCATCGACGCCGATGTCCAGAGCTCAGCCAT
GTGCTGTGCTGGGCGCCACGGACCCACACAGGCCCTCCTACTTCTCCAGCATGTAC
CCGCCGACCCCTCTACGGCGCAGTACGGGGTAAAAGTCTGCGGTCCTCCCTCCGGAC
GCCATCCTCTTACATCCCCAGATTGTGAGGCCCTCAGGTACGACAAGATGGGCTAT
GTGCGGGAGTATATTCTGTGGGCAGCGTAAATCCCAGCTTCTGGCACACCAGTTCATC
TGGAAACATGAAGACTAACATTTATCTAGATGAAGAGGGCCACCAGAAAGACCCCTGACATC
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GACTTTTACCAGCGGGAGTTTGATTTCTTTAAACAAGATCACCAACGTGTGCGCTATCATC
AAGCCCTACCCTAAAGGCGACGAGAGAAAGAAGGCTTGTCTGTCGGCCCTGTCTGAAGTG
AAGGTGCAGCCGGGCTGTACTGCCCAGCAACCCTGAGGCCATTGTGCTGGACATCGAC
TACAAGTCTGGGACCCCGATGCAGAGTGTGCAAAAGCCCATATCTGGCCAAGTTCAAG
GTGAAGCGATGTGGAGTTAGTGAAGTGAAGAAAGAGGCTGCGGTGCCGCTCAGACTCC
GAGGATGAGTGCAGCACGCAGGAGGCCGACGGCCAGAAGATCTCCTGGCAGGCAGCCATC
TTCAAGGTGGGAGACGACTGCCGGCAGGACATGCTGGCCCTGCAGATCATCGACCTCTT
AAGAACATCTTCCAGCTGGTTCGGCTGGACCTCTTTGTTTTCCCTACC CGTGGTGGCC
ACTGCCCTGGGTGCGGGGTGATCGAGTGCATCCCGACTGCACCTCCCGGGACCAGCTG
GGCCGCCAGACAGACTTCGGCATGTACGACTACTTCACACGCCAGTACGGGGATGAGTCC
ACTCTGGCCTTCCAGCAGGCCGCTACAACCTCATCCGAAGCATGGCCGCTACAGCCTC
CTGCTGTTCTCTGCTGCAGATCAAGGACAGACACAACGGCAACATTATGCTGGACAAGAAG
GGTCATATCATCCACATCGACTTTGGCTTCATGTTTAAAAGCTCGCCGGGCGCAATCTC
GGCTGGGAACCCGACATCAAGCTGACGGATGAGATGGTGATGATCATGGGGGGCAAGATG
GAGGCCACACCCTTCAAGTGGTTTCAAGGAGATGTGTGTCGAGGCTACCTGGCTGTGCGG
CCCTACATGGACGCGGTGCTCCTGGTCACTCTCATGTTGGACACGGGCTGCCTGT
TTTTCGGGCCAGACAATCAAGCTCTTGAAGCACAGTTTAAAGCCCAACATGACTGAGCGC
GAGGCTGCAAAATTCATCATGAAGGTCATCCAGAGCTGCTTCTCAGCAACAGGAGCCGG
ACCTACGACATGATCCAGTACTATCAGAATGACATCCCTACTGA
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_002650 unedited</p> <p>TACGACTCACTATAGGCGGCCGCAATTCGCACGAGGGGAGTGGCTGCTGGCTGGCAAGN ATGGAGTGAAGTGCCGTTTCATGCGGGAGATGGCAGGGGCTGGCACATGACGGTGGAGC AGAAATTTGGCCTGTTTTCTGCTGAGATAAAGGAAGCAGACCCCTGGCTGCCTCGGAAG CAAGTCAACCCAAACCTGTCCCCCGAAGTGACCCCACTACATCTGGATCGACTTCC TGGTGCAGCGGTTTGGATCGCCAAGTACTGCAGCTCTGACCAAGTGGAGATCTTCTCCA GCCTGCTGCAGCGCTCCATGTCCCTGAACATCGGCGGGGCCAAGGGGAGCATGAACCGGC ACGTGGCGGCCATCGGGCCCCGCTTCAAGCTGCTGACCTGGGGCTGTCCCTCCTGCATG CCGATGTGGTTCCAAATGCAACCATCCGCAATGTCTTCGCGAGAAGATCTACTCCTACTG CCTTTGACTACTTCAGCTGTCCCCAAAGTTCCCTACTCAAGGAGAGAAGCGGCTGCGTG AAGACATAAGCATCATGATTAATTTTGGACCGCCATGTTCTCAATTAAGAAGTACCTGA CCGCCAGCAGCTTGTCCCCAGATAATCAGGACACCCGGAGCAACCTGACCATAACTG TCGGCTCTCGCAACAAGCCACCAAGCCTGGATCACACATACCCCTGTCCAGCGGCATG TCCACCATCTCCAGAAATCCAGCATGTCTAAAAACCAACCGGGGCTCCAGCTGCCANA TACTACATGAAGCGCAGGAGCTTNTTGTGCCCTGCTGCCACTGAAAATCGACGTTAATA CTGGTCAAACCCCTGTAGCCCCGACTGGAATAAACAGCCGAAAAAAGGTGGCACCTG GAAAATAAGACATACCCTGGGAAAGCAGGGGAAGCCACGGGACCTTCTGGAA</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_002650 unedited</p> <p>CGTCGGATGCACTTCAGGGCCGGAGAGGCACTGGGGAGGGGTACAGGGATGCCACCCGG GATCTGTTCAGGAAACAGCTATGACCGCGCCGAATCTAGAGTCGAGTTTTTTTTTTTT TTTTTTTTCACTATTTTGGGTTTTTATTTTGTGATGTTGGTTAAATCTTATCTTTTT TTATACACAATACTTCATGTACCTATGAAATAAGACAGGTAGGGAATATGTCCAGTGCAA ACAGAGGACTCACACCTGTGCATAGACAGCACCATCCATTGATTGTGCTGCAGTCCATG GCGTTACCAAGGCTGCGCCACCCACGTGCTGCCCCAGGAGGCGCTACCAGTTCTTTGGG CCACAGGCCTCTCCTCCACTGCATGTGGCGGCAGGGCAGGGAGGTGCGAGGGCTCCATGA TTGTGGGACAGCTTTGAGGGCACATGGGGCAAAGGCCCTCGAAGGTCCCCCTCCTCAGTAG GGGATGTCATTCTGATAGTACTGGATCATGTGCTAGGTCCGGCTCCTGTTGCTGAGGAAG CAGCTCTGGATGACCTTCATGATGAAATTTGCAGCCTCGCGCTCAGTCATGTTGGGGCTA AACCTGTGCTTCAAGAGCTTGATTGTCTGGCCGCGAAAAACAGGGCAGGCCCGTGTCCA ATGAGAGTGACCAAGGAGACGACCGCGTCCATGTAGGGCCGACAGCCAGGTAGCCTCGG ACACACATCTCCATGAACCACTGAAGGTGTGGCCTCCATCTTCCCCCATGATCATCA CCATCTCATCCGTGAGCTTGTGTCGGGTTCCCAGCCGAGATTGCCGCCGGGAGCTT TCAACATGAGCAAGTCGATGTGATGATTGACCTCTGTCAGCATATGTGCGTTGTGTCTGT CTGATTGCACAGGACGACAGCCTGTAGCGCATGCCTCGGATGATTGAACGGCTGCTGAG CGAGTGGACTA</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_002650
Insert Size:	3000 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).
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:	<u>NM_002650.1</u> , <u>NP_002641.1</u>
RefSeq Size:	3034 bp
RefSeq ORF:	2565 bp
Locus ID:	5297
Cytogenetics:	22q11.21
Domains:	PI3_PI4_kinase, PI3Ka
Protein Families:	Druggable Genome
Protein Pathways:	Inositol phosphate metabolism, Metabolic pathways, Phosphatidylinositol signaling system
Gene Summary:	<p>This gene encodes a phosphatidylinositol (PI) 4-kinase which catalyzes the first committed step in the biosynthesis of phosphatidylinositol 4,5-bisphosphate. The mammalian PI 4-kinases have been classified into two types, II and III, based on their molecular mass, and modulation by detergent and adenosine. The protein encoded by this gene is a type III enzyme that is not inhibited by adenosine. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Apr 2018]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR and CDS compared to variant 1. The resulting isoform (2) is shorter at the N-terminus compared to isoform 1.</p>