

Product datasheet for **SC111158**

PAICS (NM_006452) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAICS (NM_006452) Human Untagged Clone
Tag:	Tag Free
Symbol:	PAICS
Synonyms:	ADE2; ADE2H1; AIRC; PAIS
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC111158 sequence for NM_006452 edited (data generated by NextGen Sequencing)

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ATGGCGACAGCTGAGGTACTGAACATTGGTAAAAAATTATATGAGGGTAAAAACAAAAGAA
GTCTACGAATTGTTAGACAGTCCAGGAAAAGTCCTCCTGCAGTCCAAGGACCAGATTACA
GCAGGAAATGCAGCTAGAAAAAACACCTGGAAGGAAAAGCTGCAATCTCAAATAAAATC
ACCAGTTGATTTTTTCAGTTATTACAGGAAGCAGGTATTAATACTGCCTTCACCAGAAAA
TGTGGGGAGACAGCTTTTCATTGCACCGCAGTGTGAAATGATTCCAATTGAATGGGTTTGC
AGAAGAATAGCAACTGGTTCTTTTCTCAAAGAAATCCTGGTGTCAAGGAAGGATATAAG
TTTTACCCACCTAAAGTGGAGTTGTTTTCAAGGATGATGCCAATAATGACCCACAGTGG
TCTGAGGAACAGCTGATTGCTGCAAAAATTTGCTTTGCTGGACTTCTTATAGCCAGACT
GAAGTGGATATCATGAGTCATGCTACACAGGCTATATTTGAAATACTGGAGAAATCCTGG
TTGCCCCAGAATTGTACTGGTTGATATGAAGATTGAATTTGGTGTGATGTAACCACC
AAAGAAATTTGTTCTTCTGCTGATGTTATTGACAATGATTCCTGGAGACTCTGGCCATCAGGA
GATCGAAGCCAACAGAAAGACAAACAGTCTTATCGGGACCTCAAAGAAGTAACTCCTGAA
GGGCTCCAAATGGTAAAGAAAAACTTTGAGTGGGTTGCAGAGAGAGTAGAGTTGCTTTTG
AAATCAGAAAGTCAGTGCAGGGTTGTAGTGTGATGGGCTCTACTTCTGATCTTGGTCCAC
TGTGAAAAAATCAAGAAGCCTGTGAAATTTTGGCATTCCATGTGAACCTCGAGTAACA
TCTGCGCATAAAGGACCAGATGAAACTCTGAGGATTAAGCTGAGTATGAAGGGGATGCC
ATTCCTACTGTATTTGTGGCAGTGGCAGGCAGAAGTAATGGTTTTGGACCAGTGTGTCT
GGGAACACTGCATATCCAGTTATCAGCTGTCTCCCTCACACCAGACTGGGGAGTTCAG
GATGTGTGGTCTTCTCTTCTCGACTACCCAGTGGTCTTGGCTGTTCAACCGTACTTTCTCCA
GAAGGATCAGCTCAATTTGCTGCTCAGATATTTGGGTTAAGCAACCATTGGTATGGAGC
AAACTGCGAGCAAGCATTTTGAACACATGGATTTCTTGAAGCAGGCTGACAAGAAAAATC
AGAGAATGTAATTTATAA

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Clone variation with respect to NM_006452.3



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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_006452 unedited TTCAAATTTTGTAAATACGACTTCACTATAGGGCGGCCGGAATTCGCACGAGGGTTCTGC CTCGCTTCCC GGCGCGGTGCGCAGCCCTCAGCCACTTAGGATAATGGCGACAGCTGAGGT ACTGAACATTGGTAAAAAATTATATGAGGGTAAAAACAAAAGAAGTCTACGAATTGTTAGA CAGTCCAGGAAAAGTCTCTGCAGTCCAAGGACCAGATTACAGCAGGAAATGCAGCTAG AAAAAACCACTGGAAGGAAAAGCTGCAATCTCAAATAAAATCACCAGTTGTATTTTTCA GTTATTACAGGAAGCAGGTATTAATAACTGCCTTACCAGAAAATGTGGGAGACAGCTTT CATTGCACCGCAGTGTGAAATGATTCCAATTGAATGGGTTTGCAGAAGAATAGCAACTGG TTCTTTTCTCAAAAGAAATCCTGGTGTCAAGGAAGGATATAAGTTTTACCCACCTAAAGT GGAGTTGTTTTTCAAGGATGATGCCAATAATGACCCACAGTGGTCTGAGGAACAGCTGAT TGCTGCAAAATTTGCTTTGCTGGACTTCTTATAGCCAGACTGAAGTGGATATCATGAG TCATGCTACACAGGCTATATTTGAAATACTGGAGAAATCCTGGTTGCCCCAGAATTGTAC ACTGGTTGATATGAAGATTGAATTTGGTGTNGATGNTACCACAAAAGAATTNNGTCTGC TGNATGTATTTGACATGATTCTGGAGACTCTGGCCATCAGGAGATCGAAGCCCNACAGA AGAACACAGTCTTATCGGGACCTCAAAGAAGTACTCCCTGAGGGCNNTCAATGGNTAAG NAAAAACTTGAGTGGGTTGCANAGAGAGTAGAGTTGCTTTTTTGAATCAGAAGTCANTGCA GGNTTGTANTGGTGAAGGCTCTACTTCTGATCTGGGTCACTGTGAAAATCAGAAAAGA</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_006452 unedited ACCGCGGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTATTCACTAATACA TTTTATTTGTGTTCTCTAATTTAAAATTACCTTTTCATCTTGCTTGATTTTCCTTCAGCT AAATTAGAAATTTGTAGTTTTTCCCTAAAAAATCAATGGCATTCTTTCTTATAAATTA CATTCTCTGATTTTCTTGTGAGCTGCTTCAAGGAAATCCATGTGTTCAAATGCTTGCT CGCAGTTTGTCCATACCAAATGGTTGCTTAACCCAAATATCTGAGCAGCAAATTGAGCT GATCCTTCTGGAGAAAGTACGGTTGAACAGCCAAGACCACTGGGTAGTGAAGAGAAAGAC CACACATCCTGAACTCCCAGTCTGGTGTGAGGGGAGGACAGCTGATAACTGGATATGCA GTGTTCCAGACATCACTGGTCCCAAACCACTTCTGCTGCCACTGCCACAAATACA GTAGGAATGCCATCCCCTTCACTCAGCTTAACTCCTCAGAGTTTCACTGCTGCTTTA TGCGCAGATGTTACTCGAAGTTCACATGGAATGCCAAAATTTCCACAGGCCTTCTTGATT TTTTACAGTGACCAAGATCAGAAGTAGAGCCCATCAACTACAACCCTGCAGTACTT TCTGATTTCAAAGCAACTCTACTCTCTGACCCCACTCAAAGTTTTTTTACCATTT GGAGCCCTTCANGAGTTACTTCTTTGAGGTCCCGNATAGACTGTTGTCTTTCTGTGGCC TTCGATCTCTGATGGCCANAGTCTCCAGAAATCATTGTCAATAACATCAGCCAGAACAA TTTCTTTGGTGGTACATCACACCAAATCAATCTTCATATCAACCAGTGTACAATTCTG GGGCAACCAGGATTCTCCAGTATTNACAAATAGCCTGGTAAACATGACTC</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_006452
Insert Size:	1500 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_006452.2</u> , <u>NP_006443.1</u>
RefSeq Size:	3322 bp
RefSeq ORF:	1278 bp
Locus ID:	10606
UniProt ID:	<u>P22234</u>
Cytogenetics:	4q12
Domains:	AIRC, SAICAR_synt
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Purine metabolism
Gene Summary:	<p>This gene encodes a bifunctional enzyme containing phosphoribosylaminoimidazole carboxylase activity in its N-terminal region and phosphoribosylaminoimidazole succinocarboxamide synthetase in its C-terminal region. It catalyzes steps 6 and 7 of purine biosynthesis. The gene is closely linked and divergently transcribed with a locus that encodes an enzyme in the same pathway, and transcription of the two genes is coordinately regulated. The human genome contains several pseudogenes of this gene. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR and lacks an alternate in-frame exon in the CDS, compared to variant 1, resulting in a shorter protein (isoform 2), compared to isoform 1. Variants 2 and 3 encode the same isoform.</p>