

Product datasheet for **RG201530**

PAICS (NM_001079524) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAICS (NM_001079524) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PAICS
Synonyms:	ADE2; ADE2H1; AIRC; PAIS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG201530 representing NM_001079524 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGACAGCTGAGGTACTGAACATTGGTAAAAAATTATATGAGGGTAAAAACAAAAGAAGTCTACGAAT
TGTTAGACAGTCCAGGAAAAGTCTCCTGCAGTCCAAGGACCAGATTACAGCAGGAAATGCAGCTAGAAA
AAACCACCTGGAAGGAAAAGCTGCAATCTCAAATAAAATCACCAGTTGTATTTTTTCAGTTATTACAGGAA
GCAGGTATTAAGTGCCTTACCAGAAAATGTGGGGAGACAGCTTTCATTGCACCGCAGTGTGAAATGA
TTCCAATTGAATGGGTTTGCAGAAGAATAGCAACTGGTCTTTTTCTCAAAGAAATCCTGGTGTCAAGGA
AGGATATAAGTTTTACCCACCTAAAGTGGAGTTGTTTTCAAGGATGATGCCAATAATGACCCACAGTGG
TCTGAGGAACAGCTGATTGCTGCAAAATTTTGCTTTGCTGGACTTCTTATAGGCCAGACTGAAGTGGATA
TCATGAGTCATGTACACAGGCTATATTTGAAATACTGGAGAAATCCTGGTTGCCCCAGAATTGTACACT
GGTTGATATGAAGATTGAATTTGGTGTGATGTAACCACCAAAGAAATGTTCTTGCTGATGTTATTGAC
AATGATTCCTGGAGACTCTGGCCATCAGGAGATCGAAGCCAACAGAAAGACAAACAGTCTTATCGGGACC
TCAAAGAAGTAAGTCTGAAGGGCTCAAATGGTAAAGAAAACTTTGAGTGGGTGCAGAGAGAGTAGA
GTTGCTTTTGAATCAGAAAGTCAGTGCAGGGTGTAGTGTGATGGGCTCTACTTCTGATCTTGGTCAC
TGTGAAAAATCAAGAAGGCCTGTGAAATTTTGGCATTCCATGTGAACCTCGAGTAACATCTGCCATA
AAGGACCAGATGAACTCTGAGGATTAAGCTGAGTATGAAGGGATGGCATTCCACTGTATTTGTGGC
AGTGGCAGGCAGAAAGTAATGGTTTGGGACCAGTGTGCTGGAAACACTGCATATCCAGTTATCAGCTGT
CCTCCCCTCACACCAGACTGGGGAGTTCAGGATGTGTGGTCTTCTCTTCGACTACCCAGTGGTCTTGGCT
GTTCAACCGTACTTTCTCCAGAAGGATCAGCTCAATTTGCTGCTCAGATATTTGGGTTAAGCAACCATTT
GGTATGGAGCAAAGTGCAGCAAGCATTTTGAACACATGGATTTCTTGAAGCAGGCTGACAAGAAAATC
AGAGAATGTAATTTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG201530 representing NM_001079524
 Red=Cloning site Green=Tags(s)

MATAEVLNIGKKLYEGKTKVEVYELLDSPGKVLVLSQSKDQITAGNAARKNHLEGKAAISNKITSCIFQLLQE
 AGIKTAFTRKCGETAFAIAPQCEMIPIEWVCRRIATGSFLKRNPGVKEGYKFYPPKVELFFKDDANNDPQW
 SEEQLIAAKFCFAGLLIGQTEVDIMSHATQAIFFEILEKSWLPQNCTLVDMKIEFGVDVTTKEIVLADVID
 NDSWRLWPSGDRSQQDKQSYRDLKEVTPPEGLQMVKKNFWEVAERVELLLKSESQCRVVVLMGSTSDLGH
 CEKIKKACGNFGIPCELRVTSAHKGPDETLRIKAEYEGDGIPTVFAVAGRSNGLGPMVSGNTAYPVISC
 PPLTPDWGVQDVWSSLRLPSGLGCSTVLSPEGSAQFAAQIFGLSNHLVWSKLRASILNTWISLKQADKKI
 RECNL

TRTRPLE - GFP Tag - V

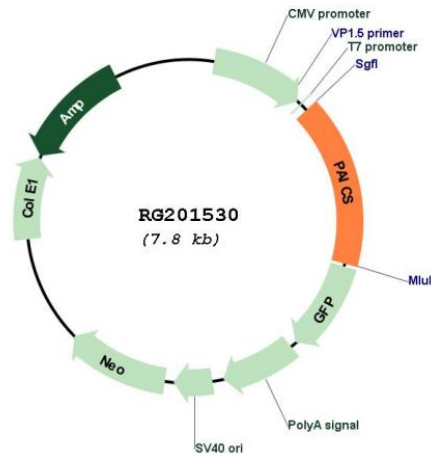
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM_001079524

ORF Size:	1275 bp
OTI Disclaimer:	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:	NM_001079524.2
RefSeq Size:	3329 bp
RefSeq ORF:	1278 bp
Locus ID:	10606
UniProt ID:	P22234
Cytogenetics:	4q12
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Purine metabolism
Gene Summary:	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]