

Product datasheet for SC120729

RPIA (NM_144563) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RPIA (NM_144563) Human Untagged Clone
Tag:	Tag Free
Symbol:	RPIA
Synonyms:	RPI; RPIAD
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC120729 sequence for NM_144563 edited (data generated by NextGen Sequencing)

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ATGCAGCGCCCGGGCCCTTCAGCACCTCTACGGCGGGTCTTGCCCCGCTGCCCGG
AGGGCCGGGGCGCGCCCTCCGGCGGAGGAGGGAACAGCTGGGACCTCCCGGTTCCAC
GTGCGGCTGCCGGGCGTGCACAGTCTGGGACCCGTGGCGGTGCTGGCAACAAGCACC
AGCTGCGGGACTCCAACAGCATCTGCCGGCCCCCTCCACGATGTCCAAGCCGAGGAG
GCCAAGAAGCTGGCGGGCCGCGGGTGTGGAGAACCACGTGAGGAATAACCAAGTGCTG
GGAATTGGAAGTGGTTCTACAATTGTCCATGCTGTGCAGCAATAGCTGAAAGGGTGAAG
CAAGAGAATCTGAACCTCGTCTGTATTCCCACTTCCTCCAGGCCCGCCAGCTCATCCTG
CAGTATGGCTTGACCCTCAGTGATCTGGATCGACACCCAGAGATCGACCTTGCCATCGAT
GGTGCTGATGAAGTAGATGCTGATCTCAATCTCATCAAGGGTGGCGGAGGCTGCCTGACC
CAGGAGAAGATTGTGGCTGGCTATGCTAGTCGTTTCATCGTGATCGCTGATTTTCAGGAAA
GATTCGAAGAATCTCGGGATCAGTGGCACAAGGGAATCCCCATCGAGGTCATCCCAATG
GCCTATGTCCCAGTGAGCCGAGCTGTGAGCCAGAAGTTTGGGGCGTGGTTGAACTTCGA
ATGGCTGTCAACAAGGCTGGTCTGTGGTGACAGATAATGGGAATTTTATCTTGGACTGG
AAGTTTGACCGGGTACACAAATGGAGTGAAGTGAATACAGCTATCAAATGATCCCAGGT
GTGGTGGACACAGGCCTATTCATCAACATGGCTGAGAGAGTCTACTTTGGGATGCAGGAT
GGCTCAGTGAACATGAGGGAGAAGCCTTTCTGTTGA

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Clone variation with respect to NM_144563.2



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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_144563 unedited</p> <pre>CCATTCATTTGTATCCGACTTCTATAGGCGGCCGCTGAATTCGCACCAGGNATGCAGC GCCCGGGGCCCTTTCAGCACCCCTCTACGGGCGGGTCTTGGCCCCGTGCCCGGGAGGGCCG GGGGCGCGGCCTCCGGCGGAGGAGGGAACAGCTGGGACCTCCCGGGTTCACAGTGCAGC TGCCGGGGCGTGCACAGTCTGGGACCCGTGGCGGTGCTGGCAACAAGCACCAGCTGCG GGGACTCAACAGCATCTGCCCGCCCCCTCCACGATGTCCAAGGCCGAGGAGGCCAAGA AGCTGGCGGGCCGCGCGCTGTGGAGAACCACGTGAGGAATAACCAAGTCTGGGAATTG GAAGTGGTTCTACAATTGTCATGCTGTGCAGCGAATAGCTGAAAGGGTGAAGCAAGAGA ATCTGAACCTCGTCTGTATTCCCACTTCTCCAGGCCCGCCAGCTCATCCTGCAGTATG GCTTGACCCTCAGTGATCTGGATCGACACCCAGAGATCGACCTTGCCATCGATGGTGCTG ATGAAGTAGATGCTGATCTCAATCTCATCAAGGGTGGCGGAGGCTGCCTGACCCAGGAGA AGAGTGTGGTGGCTATGCTAGTCGCTTCATCGTGATCGCTGATTTAGGAAAGAGTCGA AGAATCTCGNGATCAGTGGCACAAGGGAATCCTCATCGAGGTATCCCAATGGCCTATG TCCAGTAGCCGAGCTGTGAGCCAGACAGTTGGGGGGCGTGGTTGAACTACGCATGGCT GTCAACAGGCTGGTCTGTGGTGACAGATATGNGCAATTTATCTTACTGGCAGTTGACC TGGTCACACATGGAGTGAAGTGAATCAGCTATCAGTATCCAGTGTGGTGGACACCGC CTATCATCACATGCTGAGAGAGCTACTTGGAGCAGATGGCTCATGAC</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_144563 unedited</p> <pre>AGTTTGNACGGCGCCGAATCTANGANCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT TTTGGCACCACACTGTTTTATTTAAACCTGCAAACAATAAAGAGGTAAGGACTTCTGA CGCCAAACCATGCAAGTAATAACAAAGGAACAGAGAAAAATTAATAAAAAAAGAAAA TCATTAATAAATAAAAAAACAAGTACTTACATTTACAGCAGTCTTTGGCAGTACTGG CAAGCATTCTGGCAACTGCTTCCAACAGCAGGAATATGAAGAAACCCCGATCTTAG CAAAAGTGTAACAACATTTTCTCCCTGACAGCTTACATTCAAAGTCAATCCATACCATAC CGCTCCACTCCACAGTTTTATAAACCTGATCTTAAGATGTAAGTACTATGTGTGCT CACAATAAAAACTAACTAAAAACAATCAGAGGGTAGCAGACAAGTAAACAAAGTTTCCA GTAAGGCATCAGGAGATCACTGCTGGTGGGCCCCCTCACTTTACCAGCTTAAAGAAGTTTT GATTTTTATTTCTCAGCAAACCTCAATATTCAGAAGCTTTACCAGCAGACTCAAGTCAAAG GTTTTAAATACAGTTTACCTCATTTTTTTTTTTTTTGGGAAATATTCATATAAAACATGAA CTCAAGTCTACTTCATTTAAAAAAGTAAATATTTAATAGTAAAAAATATGTTTATAT TTCTCCTTTTTAAAAAGACATTTAATAACAATACTTCATAAGACTGGATTTAACTCCCT CCCACTCTTCCCCCACCACCAAGTTGTCCAGGCCGAGATACATAAAGGCAAA GGCTCCTGGAGAGGTACGTCCACCTTTGGGTGGTGGTGGAGACTCAAGGGAAAACCTC TGGTCCTTGCAGGGTCA</pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_144563
Insert Size:	1750 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:

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_144563.1](#), [NP_653164.1](#)

RefSeq Size: 1826 bp

RefSeq ORF: 714 bp

Locus ID: 22934

UniProt ID: [P49247](#)

Cytogenetics: 2p11.2

Protein Pathways: Metabolic pathways, Pentose phosphate pathway

Gene Summary: The protein encoded by this gene is an enzyme, which catalyzes the reversible conversion between ribose-5-phosphate and ribulose-5-phosphate in the pentose-phosphate pathway. This gene is highly conserved in most organisms. The enzyme plays an essential role in the carbohydrate metabolism. Mutations in this gene cause ribose 5-phosphate isomerase deficiency. A pseudogene is found on chromosome 18. [provided by RefSeq, Mar 2010]