

Product datasheet for **RG202183**

RPIA (NM_144563) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RPIA (NM_144563) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RPIA
Synonyms:	RPI; RPIAD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202183 representing NM_144563 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGCGCCCCGGGCCCTTCAGCACCTCTACGGCGGGTCTTGGCCCCGCTGCCGGGAGGGCCGGGG
GCGCGCCTCCGGCGGAGGAGGGAACAGCTGGGACCTCCCGGTTCCACGTGCGGCTGCCGGGCGTG
ACAGTCTGGGACCCGTGGCGGTGCTGGCAACACAAGCACCAGCTGCGGGGACTCCAACAGCATCTGCCCC
GCCCCCTCCACGATGTCCAAGGCCGAGGAGGCCAAGAAGCTGGCGGGCCGCGGGCTGTGGAGAACCACG
TGAGGAATAACCAAGTGTGGGAATTGGAAGTGGTTCTACAATTGTCCATGCTGTGCAGCGAATAGCTGA
AAGGGTGAAGCAAGAGAATCTGAACCTCGTCTGTATTCCCACTTCTCCAGGCCGCCAGCTCATCCTG
CAGTATGGCTTGACCCTCAGTGATCTGGATCGACACCCAGAGATCGACCTTGCCATCGATGGTGCTGATG
AAGTAGATGCTGATCTCAATCTCATCAAGGGTGGCGGAGGCTGCCTGACCCAGGAGAAGATTGTGGCTGG
CTATGCTAGTCGTTTCATCGTATCGTGATTTTCAGGAAAGATTCGAAGAATCTCGGGGATCAGTGGCAC
AAGGGAATCCCCATCGAGGTCATCCCAATGGCCTATGTCCAGTGAGCCGAGCTGTGAGCCAGAAGTTTG
GGGCGTGGTTGAACTTCGAATGGCTGTCAACAAGGCTGGTCTGTGGTGACAGATAATGGGAATTTTAT
CTTGGACTGGAAGTTTGACCGGGTACACAAATGGAGTGAAGTGAATACAGCTATCAAATGATCCAGGT
GTGGTGGACACAGGCCTATTCATCAACATGGCTGAGAGAGTCTACTTTGGGATGCAGGATGGCTCAGTGA
ACATGAGGGAGAAGCCTTCTGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG202183 representing NM_144563
Red=Cloning site Green=Tags(s)

MQRPGPFSTLYGRVLA LPLPGRAGGAASGGGGNSWDLPGSHVRLPGRAQSGTRGGAGNTSTSCGDSNSICP
 APSTMSKAEAEAKLAGRAAVENHVRNNQVLGIGSGSTIVHAVQRIAERVKQENLNLVCIPTSFQARQLIL
 QYGLTSLDLDRHPEIDL AIDGADEV DADLNLIKGGGGCLTQEKIVAGYASRFIVIA DFRKDSKNLGDQWH
 KGIPIEIVPMAYVPVSRVAVSQKFGGVVELRMAV NKAGPVVTDNGNFILDWKFDRVHKWSEVNTAIKMIPG
 VVDTGLFINMAERYVYFGMQDGSVNMREKPF C

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_144563

ORF Size: 933 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:

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_144563.3](#)

RefSeq Size: 1834 bp

RefSeq ORF: 936 bp

Locus ID: 22934

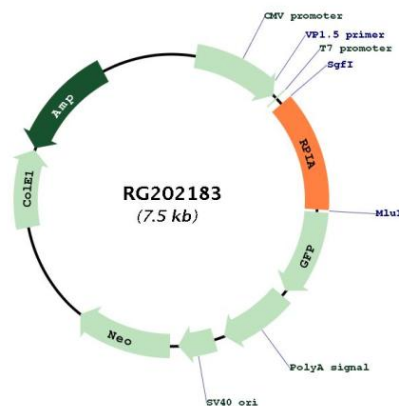
UniProt ID: [P49247](#)

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]

Product images:



Circular map for RG202183