

Product datasheet for **RG203376**

PHAX (NM_032177) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	PHAX
Synonyms:	RNUXA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG203376 representing NM_032177
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGTTGGAGGTCGGCGATATGGAAGATGGGCAGCTTCCGACTCGGATCCGACATGACGGTCGCAC
CCAGCGACAGGCCGCTGCAATTGCCAAAAGTGCTAGGTGGCGACAGTGCTATGAGGGCCTCCGAAACAC
GGCAACTGCATGTGCACCATGATCATTATCGAGCTGTTGAAAGTGTGGATTCAAGTGAAGAAAGTTTT
TCTGATTAGATGATAGCTGTCTTTGAAACGCAACGACAGAAATGTTTAACCTCCTCCCAAAC
CAGAGCCTTTTCAGTTTGGCCAGAGCAGTCAGAAACCACCTGTTGCTGGAGGAAAGAAGATTAACAACAT
ATGGGGTGTGCTGCAGGAACAGAATCAAGATGCAGTGGCCACTGAACTTGGTATCTTGGGAATGGAG
GGCACTATTGACAGAAGCAGACAATCCGAGACCTACAATTATTTGCTTGCCAAGAACTTAGGAAGGAAT
CTCAAGAGCATACAAAAGATCTAGACAAGGAAGTAGATGAATATATGCATGGTGGCAAAAAATGGGATC
AAAGGAAGAGGAAAATGGGCAAGGTCATCTCAAAGGAAACGACCTGTCAAAGACAGGCTAGGGAACAGA
CCAGAAATGAACTATAAAGGTCGATACGAGATCACAGCGGAAGATTCTCAAGAGAAAGTGGCTGATGAAA
TTTCATTAGGTTACAGGAACCAAGAAAGACCTGATAGCCCGAGTAGTGAGGATTATTGGTAACAAAAA
GGCAATTGAACTTCTGATGGAACCGCTGAAGTTGAACAAAATGGTGTCTCTTTATAATGAATGGTAGT
CGAAGAAGAACACCAAGTGGAGTTTTCTGAATCTCTTGAAAAACACTCCTAGTATCAGCGAGGAACAAA
TTAAGGACATTTTCTACATTGAAAACCAAGGAATATGAAAAATAAAAAAGCTGCTAGGAAGAGGAGAAC
ACAAGTGTGGGAAAAAGATGAAACAAGCTATTAAGAGTCTAAATTTTCAAGAAGATGATGATACATCA
CGAGAACTTTTGAAGTGACACGAATGAGGCCTTGGCCTCTCTTGATGAGTCACAGGAAGGACATGCAG
AAGCCAAGTTGGAGGCAGAGGAAGCCATTGAAGTTGATCATTCTCATGATTGGACATCTTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



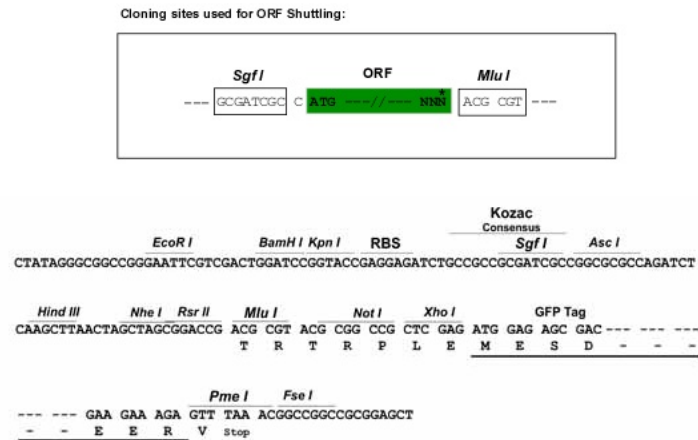
Protein Sequence: >RG203376 representing NM_032177
Red=Cloning site Green=Tags(s)

MALEVGMEDGQLSDSDSDMTVAPSDRPLQLPKVLGGDSAMRAFQNTATACAPVSHYRAVESVDSSEESF
SDSDDDSCLWKRKRQKCFNPPPKPEPFQFGQSSQKPPVAGGKKINNIWGAVLQEQNQDAVATELGILGME
GTIDRSRQSETYNYLLAKKLKESQEHTKDLDEYMHGKKMGSKEEENGQGHLLKRKRPVKDRLGNR
PEMNYKGRIEITAEDSQEKVADEISFRLQEPKDLIARVVRIGNKKAIELLMETAEVEQNGGLFIMNGS
RRRTPGGVFLNLLKNTPSISEEQIKDIFYIENQKEYENKKAARKRRTQVLGKKMKQAIKSLNFQEDDDTS
RETFASDTNEALASLDESQEGHAEAKLEAEAAIEVDHSHDLIDF

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_032177

ORF Size: 1182 bp

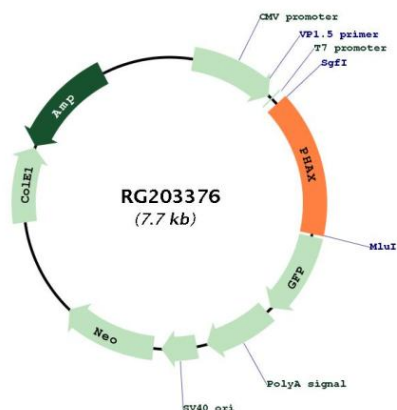
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_032177.4</u>
RefSeq Size:	1751 bp
RefSeq ORF:	1185 bp
Locus ID:	51808
UniProt ID:	<u>Q9H814</u>
Cytogenetics:	5q23.2
Gene Summary:	A phosphoprotein adapter involved in the XPO1-mediated U snRNA export from the nucleus. Bridge components required for U snRNA export, the cap binding complex (CBC)-bound snRNA on the one hand and the GTPase Ran in its active GTP-bound form together with the export receptor XPO1 on the other. Its phosphorylation in the nucleus is required for U snRNA export complex assembly and export, while its dephosphorylation in the cytoplasm causes export complex disassembly. It is recycled back to the nucleus via the importin alpha/beta heterodimeric import receptor. The directionality of nuclear export is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus. Its compartmentalized phosphorylation cycle may also contribute to the directionality of export. Binds strongly to m7G-capped U1 and U5 small nuclear RNAs (snRNAs) in a sequence-unspecific manner and phosphorylation-independent manner (By similarity). Plays also a role in the biogenesis of U3 small nucleolar RNA (snoRNA). Involved in the U3 snoRNA transport from nucleoplasm to Cajal bodies. Binds strongly to m7G-capped U3, U8 and U13 precursor snoRNAs and weakly to trimethylated (TMG)-capped U3, U8 and U13 snoRNAs. Binds also to telomerase RNA.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG203376