

## Product datasheet for **RG200441**

### PHOX2B (NM\_003924) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PHOX2B (NM_003924) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PHOX2B
Synonyms:	CCHS; NBLST2; NBPhox; PMX2B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG200441 representing NM_003924 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTATAAAATGGAATATTCTTACCTCAATTCCTCTGCCTACGAGTCCTGTATGGCTGGGATGGACACCT  
CGAGCCTGGCTTCAGCCTATGCTGACTTCAGTTCCTGCAGCCAGGCCAGTGGCTTCCAGTATAACCCGAT  
AAGGACCACTTTTGGGGCCACGTCGGCTGCCCTCCCTCACGCCGGGATCCTGCAGCCTGGGCACCCTC  
AGGACCACCAGAGCAGTCCGTACGCCGAGTTCCTTACAAACTTTCACGGACCAGGGCGCCTCAACG  
AGAAGCGCAAGCAGCGGCATCCGACCACTTTCACCAGTGCCAGCTCAAAGAGCTGAAAGGGTCTT  
CGCGGAGACTCACTACCCGACATCTACACTCGGGAGGAGCTGGCCCTGAAGATCGACCTCACAGAGGCG  
CGAGTCCAGGTGTGGTCCAGAACCGCCGCAAGTTTCGCAAGCAGGAGCGCGCAGCGGCAGCCGAG  
CGGCCGCGCCAAGAACGGCTCCTCGGGCAAAAAGTCTGACTCTTCCAGGGACGACGAGAGCAAAGAGGC  
CAAGAGCACTGACCCGGACAGCACTGGGGGCCAGGTCCCAATCCCAACCCACCCAGCTGCGGGGCG  
AATGGAGGCGGCGGCGGGCCAGCCGGCTGGAGCTCCGGGGCGGCGGGGCCCGGGGGCCGGGAG  
GCGAACCCGGCAAGGGCGGCGCAGCAGCAGCGGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG  
GGCGGCGAGCTGGAGGCTGGCTGCGGCTGGGGCCCTGGACAAGGCTGGGCTCCCGGCCCGGCCCATC  
ACCTCCATCCCGATTTCGCTTGGGGTCCCTTCGCCAGCGTCTATCTTCGCTCCAAAGACCCAACGGTG  
CCAAAGCCGCCTTAGTGAAGAGCAGTATGTTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG200441 representing NM\_003924  
Red=Cloning site Green=Tags(s)

MYKMEYSYLNSSAYESCMAGMDTSSLASAYADFSSCSQASGFQYNPIRTTFGATSGCPSLTPGSCSLGTL  
 RDHQSSPYAAVPYKLFTHDGLNEKRKQRRIRTTFTSAQLKELERVFAETHYPDIYTREELALKIDLTEA  
 RVQVWFQNRRAKFRKQERAAAAAAAAAANGSSGKSDSSRDDESKEAKSTDPDSTGGPGPNPPTPCGA  
 NGGGGGGPSPAGAPGAAGPGGPGGEPGKGGAAAAAAAAAAAAAAAAAAGGLAAAGGPGQGWAPGPGPI  
 TSIPDSLGGPFASVLSLQRPNGAKAALVKSSMF

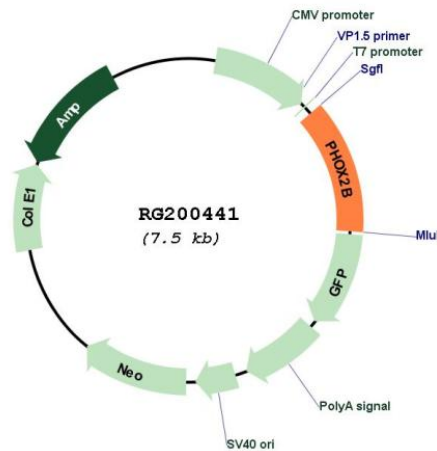
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_003924

**ORF Size:** 942 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>Components:</b>	<p>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).</p>
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_003924.4</a>
<b>RefSeq Size:</b>	3033 bp
<b>RefSeq ORF:</b>	945 bp
<b>Locus ID:</b>	8929
<b>UniProt ID:</b>	<a href="#">Q99453</a>
<b>Cytogenetics:</b>	4p13
<b>Gene Summary:</b>	<p>The DNA-associated protein encoded by this gene is a member of the paired family of homeobox proteins localized to the nucleus. The protein functions as a transcription factor involved in the development of several major noradrenergic neuron populations and the determination of neurotransmitter phenotype. The gene product is linked to enhancement of second messenger-mediated activation of the dopamine beta-hydroxylase, c-fos promoters and several enhancers, including cyclic amp-response element and serum-response element. Expansion of a 20 amino acid polyalanine tract in this protein by 5-13 aa has been associated with congenital central hypoventilation syndrome. [provided by RefSeq, Jul 2016]</p>