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Product datasheet for RG208331

PHOX2A (NM_005169) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHOX2A (NM_005169) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PHOX2A
Synonyms:	ARIX; CFEOM2; FEOM2; NCAM2; PMX2A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG208331 representing NM_005169 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGACTACTCCTACCTCAATTCGTACGACTCGTGCGTGGCGGCCATGGAGGCGTCCGCCTACGGCGACT TTGGCGCCTGCAGCCAGCCCGGCGGCTTCCAATACAGCCCCCTGCGGCCCGCTTTCCCCGCGGCAGGGCC GCCCTGCCCCCGCGCTCGGCTCCTCCAACTGCGCACTTGGCGCCCTACGCGACCACCAGCCCGCGCCCTAC TCGGCAGTGCCCTACAAGTTCTTCCCAGAGCCATCCGGCCTGCACGAGAAGCGCAAGCAGCGGCGCATCC GCACCACGTTCACCAGCGCGCAGCTCAAGGAGCTGGAGCGCGTTTTCGCTGAGACCCACTACCCCGACAT TTACACGCGTGAGGAGCTGGCGCTCAAGATCGACCTCACTGAGGCTCGCGTGCAGGTCTGGTTCCAGAAC CGCCGGGCCAAGTTCCGCAAACAGGAGCGCGCGGCCAGCGCCAAGGGCGCGGCGGGCGCGGCGGGCGCCA AAAAGGGCGAGGCGCGCTGCTCCTCCGAGGACGACGATTCCAAGGAGTCCACGTGCAGCCCCACGCCCGA TAGCACCGCCTCGCTGCCGCCGCCGCCTGCGCCCGGCCTGGCCAGCCCGCGCCTGAGCCCCAGCCCGCTG CCCGTCGCACTGGGCTCCGGGCCGGGACCTGGGCCGGGGCCACAGCCGCTCAAGGGCGCACTGTGGGCCG GTGTGGCGGGCGGTGGGGGCGGCGGGCCTGGCGCGGGAGCGGCCGAACTACTTAAGGCTTGGCAGCCGGC GGAGTCCGGCCCCGGGCCCTTCTCCGGGGTTCTGTCCTCCTTTCACCGGAAGCCCGGCCCCGCCCTGAAG ACCAATCTCTTC AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

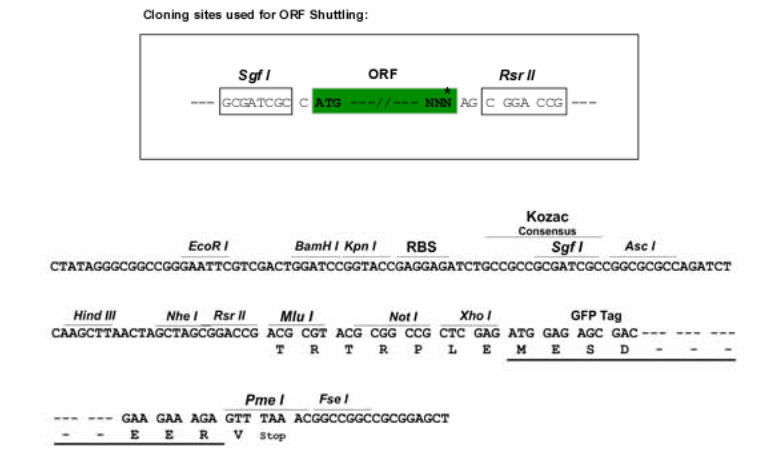
>RG208331 representing NM_005169
Red=Cloning site Green=Tags(s)

MDYSYLNSYDSCVAAMEASAYGDFGACSQPGGFQYSPLRPAFPAAGPPCPALGSSNCALGALRDHQPAPY
SAVPYKFFPEPSGLHEKRKQRRIRTTFTSAQLKELERVFAETHYPDIYTREELALKIDLTEARVQVWFQN
RRAKFRKQERAASAKGAAGAAGAKKGEARCSSEDDDSKESTCSPTPDSTASLPPPPAPGLASPRLSPSPL
PVALGSGPGPGPGPQPLKGALWAGVAGGGGGGPGAGAAELLKAWQPAESGPGPFSGVLSSFHRKPGPALK
TNLF

SGPTRTRRLE – GFP Tag – V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_005169

ORF Size: 852 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_005169.4

RefSeq Size: 1716 bp

RefSeq ORF: 855 bp

Locus ID: 401

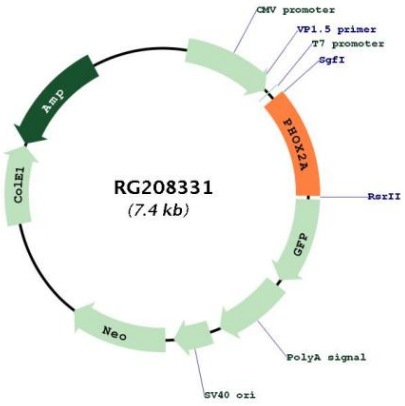
UniProt ID: O14813

Cytogenetics: 11q13.4

Protein Families: Transcription Factors

Gene Summary: The protein encoded by this gene contains a paired-like homeodomain most similar to that of the Drosophila aristaless gene product. The encoded protein plays a central role in development of the autonomic nervous system. It regulates the expression of tyrosine hydroxylase and dopamine beta-hydroxylase, two catecholaminergic biosynthetic enzymes essential for the differentiation and maintenance of the noradrenergic neurotransmitter phenotype. The encoded protein has also been shown to regulate transcription of the alpha3 nicotinic acetylcholine receptor gene. Mutations in this gene have been associated with autosomal recessive congenital fibrosis of the extraocular muscles. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG208331