

## Product datasheet for **RG206921**

### **PKNOX2 (NM\_022062) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PKNOX2 (NM_022062) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PKNOX2
Synonyms:	PREP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG206921 representing NM\_022062  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGATGCAACATGCCTCCCCAGCCCCCGCTCTGACGATGATGGCCACGCAGAATGTCCGCCCCACCCCT  
 ACCAGGACAGCCACAGATGACGGCAACCGCCAGCCACCCTCCAAGGCCAGGCTGTCCACATCTCTGC  
 CCCCTCAGCTGCTGCCAGCACACCTGTGCCAGTGCCCCATCGACCCCAAGGCCAGCTGGAGGCTGAC  
 AAGCGAGCTGTATACAGGCACCTCTTTTCCCGCTCCTGACGCTGCTGTTTGAGAAATGTGAACAGGCCA  
 CCCAGGGCTCTGAGTGACACCTCCGCCAGCTTTGATGTGGACATCGAGAACTTTGCCACCAGCAGGA  
 ACAGGAGCACAAACCTTCTTCAGCGATGACCCAGAATGGACAATCTGATGGTGAAGGCAATCCAGGTC  
 CTGAGAATCCACCTGCTGGAGCTGGAGAAAGTCAATGAACTCTGCAAGGACTTTTGAACCGTTACATCA  
 CCTGCCTCAAACCAAGATGCACAGCGACAACCTGCTCAGGAATGATCTAGGGGGGCCCTACTCCCCAA  
 CCAGCCCTCCATCAACCTTCACTCCAGGACCTCTGCAGAATCCCCCAATTCCATGTCCGGAGTCTCC  
 AATAACCCCAAGGGGATTGTGGTCCCAGCTCAGCGCTCCAGCAGGGCAACATCGCCATGACAACCGTCA  
 ACTCACAAGTTGTGTGAGGTGGAGCCTTATACCAACCGGTTACCATGGTAACTCCAGGGTCAGGTGGT  
 CACCCAAGCAATCCCCAGGGAGCCATCCAGATCCAGAACACACAGGTTAACCTTGACCTCACCTCCCTC  
 CTGGACAATGAGGATAAGAAGTCCAAGAACAACGAGGAGTCTTGCCCAAGCATGCCACCAATATAATGC  
 GTTCTTGGCTCTTCCAGCATCTCATGCACCCCTACCCACGGAGGATGAGAAGAGGCAGATCGCAGCCCA  
 GACCAACCTCACCTCCTGCAAGTAAACAACCTGGTTCAATGCCCGGAGGCGCATCTGCAGCCCATG  
 CTTGATGCCAGCAACCCAGATCCTGCCCAAGCCAAGAAGTCAAGTCTCAGCACCGGCCACCCAAA  
 GATTCTGGCCCAACTCCATCGCTGCGGGGTGCTGCAGCAGCAGGGCGGTGCCCAAGGACAAACCCCGA  
 TGGTTCCATCAACTTGGACAACCTGCAGTCCCTGTCTCAGACAGTGCCACCATGGCCATGCAGCAGGCT  
 ATGATGGCTGCACACGATGACTATTGGATGGGACAGAAGAAGAGGATGAGGATGAGATGGAAGAGGAGG  
 AGGAGGAGCTGGAGGAGGAGGTCGACGAGCTGCAGACGACAAATGTCAGCGACCTGGGCTTGAACACAG  
 TGACTCCCTGGAG

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG206921 representing NM\_022062  
 Red=Cloning site Green=Tags(s)

MMQHASPAPAL TMMATQNVPPPPYQDSPQMTATAQPPSKAQAVHISAPSAAA STPVPSAPIDPQAQLEAD  
 KRAVYRHPLFPLL TLLFEKCEQATQGSECITSA SFDVDIENFVHQEQEHKPFSDDP ELDNLMVKAIQV  
 LRIHLLLEKVNELCKDFCNRYITCLKTKMHSNLLRNDLGGPYSPNQPSINLHSQDLLQNSPNSMSGVS  
 NNPQGI VVPASALQQGNIAMTTVNSQVVS GGALYQPVMTVTSQGGVVTQAIPQGA IQIQTQVNLDTSL  
 LDNEDKKS KNKRGVLPKHATNIMRSWLFQHL MHPYPTDEKRQIAAQTNL TLLQVNNWF INARRRILQPM  
 LDASNPD PAKKIKSQRPTQRFWPNSIAAGVLQQQGGAPGTNPDGSINLDNLQSLSSDSATMAMQQA  
 MMAAHDDSLDGT EEEDEMEEEEEEEVEDELQTTNVS DLGLEHSDSLE

**TR**TRPLE – GFP Tag – V

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_022062

**ORF Size:** 1416 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\\_022062.2](#), [NP\\_071345.2](#)

**RefSeq Size:** 3730 bp

**RefSeq ORF:** 1419 bp

**Locus ID:** 63876

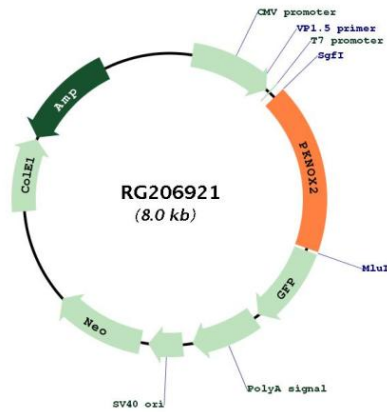
**UniProt ID:** [Q96KN3](#)

**Cytogenetics:** 11q24.2

**Protein Families:** Transcription Factors

**Gene Summary:** Homeodomain proteins are sequence-specific transcription factors that share a highly conserved DNA-binding domain and play fundamental roles in cell proliferation, differentiation, and death. PKNOX2 belongs to the TALE (3-amino acid loop extension) class of homeodomain proteins characterized by a 3-amino acid extension between alpha helices 1 and 2 within the homeodomain (Imoto et al., 2001 [PubMed 11549286]).[supplied by OMIM, Oct 2009]

**Product images:**



Circular map for RG206921