

## Product datasheet for **RG208321**

### ZHX2 (NM\_014943) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ZHX2 (NM_014943) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ZHX2
Synonyms:	AFR1; RAF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG208321 representing NM\_014943  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTAGCAAACGAAAATCTACAACCTCCATGCATGGTTCGGACATCACAAGTAGTAGAACAGATGTGC  
 CCGAGGAAGTAGACAGGGCCAAAGAGAAAAGGAATCGGCACACCACAGCCTGACGTGGCCAAGGACAGTTG  
 GGCAGCAGAACTTGAAAACCTCTTCCAAAAGAAAACGAAGTGATAGAGGTGAAATCTATGGGGAAAGCCAG  
 TCCAAAAAATCCAAGTGGTTATGAGTGCAAATACTGCCCTACTCCACGCAAAACCTGAACGAGTTCA  
 CGGAGCATGTCGACATGCAGCATCCCAACGTGATTCTCAACCCCTCTACGTGTGTGAGAATGTAACCT  
 CACAACCAAAAAGTACGACTCCCTATCCGACCACAACCTCAAGTTCATCCCGGGGAGGCCAACTTCAAG  
 CTGAAGTTAATTAACGCAATAATCAAACGTCTTGGAACAGTCCATCGAAACCACCAACCATGTCGTGT  
 CCATCACCACCAGTGGCCCTGGAACGGTACAGTATTCTGGGATCTCGGTGAGTAAAACCCCATCAT  
 GAAGCCTGGAAAACAAAAGCGGATGCCAAGAAGGTGCCAAGAAGCCCGAGGAGATCACCCCGAGAAC  
 CACGTGGAAGGGACCGCCCGCTGGTGACAGACACAGCTGAGATCCTCTCGAGACTCGGGCGGGTGGAGC  
 TCTCCAAGACACATTAGGACACGTCATGCCTTCTGTACAGCTGCCACCAAAATATCAACCTTGTGCCAA  
 GGTCCCTGTCCCACTAAATACTACCAAATAACAACCTCTGCCCTGGATACAAATGCCACGATGATCAACTCT  
 TTCAACAAGTTTCCTTACCCGACCCAGGCTGAGTTGTCTGGCTGACAGCTGCCTCCAAACCCAGAGG  
 AGCACATCAGAATCTGGTTTGCCACCCAGCGCTTAAAGCATGGCATCAGTGGTCCCCAGAAGAGGTGGA  
 GGAGGCCCGGAAGAAGATGTTCAACGGCACCATCCAGTCACTACCCCGACCATCACTGTGCTGCCCGCC  
 CAGTTGGCCCCCAAAAGGTGACGCAGCCCATCCTCCAGACGGCTCTACCGTCCAGATCCTCGGCCAGA  
 CTAGCCTGGTGTGACTCAGGTGACCGGGTCAACAACCGTCTCTTGTCCCCATCACACTTGGCCG  
 GGCAGGAGTCACCAACCATGGCCAGAAGAGACCCTTGGTGAATCCCAAGCTGCCCCGAACCCAAAGCGT  
 CCACACATCGCTCAGGTGCCAGACCCCAACCCAGGTGGCAACCCCGCTCACACCAGCCAGTGACC  
 GCAAGAAGACAAAGGAGCAGATAGCACATCTCAAGGCCAGCTTTCTCCAGAGCCAGTTCCCTGACGATGC  
 CGAGGTTTACCGCTCATCGAGGTGACTGGCCTTGCCAGGAGCGAGATCAAGAAGTGGTTCAGTGACCAC  
 CGATATCGGTGTCAAAGGGGCATCGTCCACATCACCAGCGAATCCCTTGCCAAAGACCAGTTGGCCATCG  
 CGGCTCCCGACACGGTGCACGTATCATGCGTACCCAGACTTTGCCCCCAAGAAGTTCAAAGAGAAAAC  
 ACAGGGTCAGGTTAAAATCTTGAAGACAGCTTTTGGAAAAGTTCTTTCTACCCAAGCAGAAGTGGAT  
 CGGCTAAGGGTGGAGACCAAGCTGAGCAGGAGAGAGATCGACTCCTGGTCTCGGAGAGGCGGAAGCTTC  
 GAGACAGCATGGAACAAGCTGTCTTGGATTCCATGGGGTCTGGCAAAAAAGGCCAAGATGTGGGAGCCCC  
 CAATGGTGTCTGTCTCGACTCGACCAGCTCTCCGGTGCCAGTTAACAAGTTCTCTGCCAGCCCTTCG  
 CCAGCAATTGCAAAAAGTCAAGAACAGGTTTCTCTGAGGAGCACGTTTGCAAGAACCAGTGGCCCTA  
 CTCCCCAGGAGTACGACCAGTTAGCGGCCAAGACTGGCCTGGTCCGAAGTGAATTTGCGGTTGGTTCAA  
 GGAGAACAGATGCTTGTGAAAACGGGAACCGTGAAGTGGATGGAGCAGTACCAGCACCAGCCATGGCA  
 GATGATCACGGCTACGATGCCGTAGCAAGGAAAGCAACAAAACCCATGGCCGAGAGCCCAAGAAGCGGG  
 GTGATGTGGTTCCACAATATTACAAGGACCCCAAAAAGCTCTGCGAAGAGGACTTGGAGAAGTTGGTGAC  
 CAGGGTAAAAGTAGGCAGCGAGCCAGCAAAAAGACTGTTTGCCAGCAAAGCCCTCAGAGGCCACCTCAGAC  
 CGGTGAGAGGGCAGCAGCCGGGACGGCCAGGGTAGCGACGAGAAGGAGTTCGAGCGTTGTGGATTACG  
 TGGAGGTGACGGTCCGGGAGGAGGATGCGATCTCAGATAGATCAGATAGCTGGAGTCAGGCTGCGGCAGA  
 AGGTGTGTCGGAAGTGGTGAATCAGACTCCGACTGCGTCCCTGCAGAGGCTGGCCAGGCC

**ACCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

Protein Sequence: >RG208321 representing NM\_014943  
Red=Cloning site Green=Tags(s)

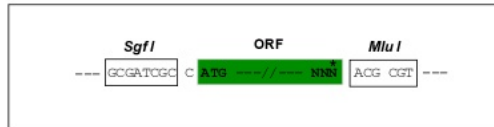
MASKRKSTTPCMVRTSQVVEQDVPEEVDRAKEKIGITPQPDVAKDSWAAELENSSKENEVIEVKSMGESQ  
SKKLQGGYECKYCPYSTQNLNEFTEHVDMQHPNVILNPLYVCAECNFTTKKYDSLSDHNSKFHPGEANFK  
LKLIKRNNQTVLEQSIETTNNHVVSITTSGPGTGSDSGISVSKTPIMKPGKPKADAKKVPKKPEEITPEN  
HVEGTARLVTDTAEILSRLGGVELLQDTLGHVMPVSVQLPPNINLVKVPVPLNTTKYNSALDTNATMINS  
FNKFPYPTQAEISWLTAAASKHPEEHIRIWFATQRLKHGISWSPEEVEEARKKMFNGTIQSVPTITVLP  
QLAPTQVTPILQALPCQILGQTSVLVLTQVTSSTTVSCSPITLAVAGVTNHGQKRPLVTPQAAPEPKR  
PHIAQVPEPPPKNVANPPLTPASDRKKTKEQIAHLKASFLQSQFPDDAEVYRLIEVTGLARSEIKKWFSDH  
RYRCQRGIVHITSESLAKDQLAIAASRHGRTYHAYPDFAPQKFKEKTQGQVKILEDSFLKSSFTQAELE  
RLRVETKLSRREIDSWFSERRKLRDSMEQAVLDSMSGKKGQDVGAPNGALSRLDQLSGAQLTSSLPSPS  
PAIAKSQEQVHLLRSTFARTQWPTQEQYDQLAAKTGLVRTEIVRWFKENRCLLKTGTVKWMEQYQHQPMA  
DDHGYDAVARKATKPMAESPKNGGDVVPQYYKDPKCLCEEDLEKLVTRVKVGSEPAKDCLPAKPEATSD  
RSEGSSRDGQGSDENEESSVVDYVEVTVGEEDAISDRSDSWSQAAAEVSELAESDSDCVPAEAGQA

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

## Cloning Scheme:

Cloning sites used for ORF Shutting:



Kozac  
Consensus

EcoRI   BamHI KpnI   RBS   SgfI   AscI

CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

HindIII   NheI   RsrII   MluI   NotI   XhoI   GFP Tag

CAAGCTTAACTAGCTAGCGGACCG   ACG CGT   ACG CGG CCG CTC GAG   ATG GAG AGC GAC --- --- ---

PmeI   FseI

--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT

- - - E E R V Stop

ACCN: NM\_014943

ORF Size: 2511 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\\_014943.5](#)

**RefSeq Size:** 4373 bp

**RefSeq ORF:** 2514 bp

**Locus ID:** 22882

**UniProt ID:** [Q9Y6X8](#)

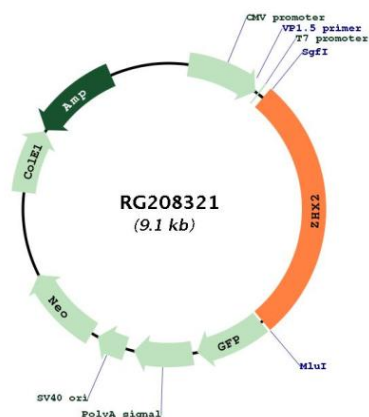
**Cytogenetics:** 8q24.13

**Domains:** homeobox, zf-C2H2

**Protein Families:** Transcription Factors

**Gene Summary:** The members of the zinc fingers and homeoboxes gene family are nuclear homodimeric transcriptional repressors that interact with the A subunit of nuclear factor-Y (NF-YA) and contain two C2H2-type zinc fingers and five homeobox DNA-binding domains. This gene encodes member 2 of this gene family. In addition to forming homodimers, this protein heterodimerizes with member 1 of the zinc fingers and homeoboxes family. [provided by RefSeq, Jul 2008]

## Product images:



Circular map for RG208321