

Product datasheet for **RC208321**

ZHX2 (NM_014943) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZHX2 (NM_014943) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ZHX2
Synonyms:	AFR1; RAF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC208321 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTAGCAAACGAAAATCTACAACCTCCATGCATGGTTCGGACATCACAAGTAGTAGAACAGATGTGC
 CCGAGGAAGTAGACAGGGCCAAAGAGAAAAGGAATCGGCACACCACAGCCTGACGTGGCCAAGGACAGTTG
 GGCAGCAGAACTTGAAAACCTCTTCCAAAAGAAAACGAAGTGATAGAGGTGAAATCTATGGGGAAAGCCAG
 TCCAAAAAATCCAAGTGGTTATGAGTGCAAATACTGCCCTACTCCACGCAAAACCTGAACGAGTTCA
 CGGAGCATGTCGACATGCAGCATCCCAACGTGATTCTCAACCCCTCTACGTGTGTGAGAATGTAACCT
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 CTGAAGTTAATTAACGCAATAATCAAACGTCTTGGAACAGTCCATCGAAACCACCAACCATGTCGTGT
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 GAAGCCTGGAAAACAAAAGCGGATGCCAAGAAGGTGCCAAGAAGCCCGAGGAGATCACCCCGAGAAC
 CACGTGGAAGGGACCGCCCGCTGGTGACAGACACAGCTGAGATCCTCTCGAGACTCGGGCGGGTGGAGC
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 GGTCCCTGTCCCCTAAATACTACCAAATAACAACCTCTGCCCTGGATACAAATGCCACGATGATCAACTCT
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 CAGTTGGCCCCCAAAAGGTGACGCAGCCCATCCTCCAGACGGCTCTACCGTCCAGATCCTCGGCCAGA
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 GGCAGGAGTCACCAACCATGGCCAGAAGAGACCCTTGGTACTCCCAAGCTGCCCCGAACCCAAAGCGT
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 CGGCTCCCGACCGGTGCACGTATCATGCGTACCCAGACTTTGCCCCCAAGAAGTTCAAAGAGAAAAC
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 CCAGCAATTGCAAAAAGTCAAGAACAGGTTTCTCTGAGGAGCACGTTTGCAAGAACCAGTGGCCCTA
 CTCCCCAGGAGTACGACCAGTTAGCGGCCAAGACTGGCCTGGTCCGAAGTGAATTTGCGTTGGTTCAA
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 CGGTGAGAGGGCAGCAGCCGGGACGGCCAGGGTAGCGACGAGAACGAGGAGTCCGAGCGTTGTGGATTACG
 TGGAGGTGACGGTCCGGGAGGAGGATGCGATCTCAGATAGATCAGATAGCTGGAGTCAGGCTGCGGCAGA
 AGGTGTGTCCGAACTGGCTGAATCAGACTCCGACTGCGTCCCTGCAGAGGCTGGCCAGGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208321 protein sequence
Red=Cloning site Green=Tags(s)

MASKRKSTTPCMVRTSQVVEQDVPEEVDRAKEKIGITPQPDVAKDSWAAELENSSKENEVIEVKSIMGESQ
SKKLQGGYECKYCPYSTQNLNEFTEHVDMQHPNVILNPLYVCAECNFTTKKYDSLSDHNSKFHPGEANFK
LKLIKRNNQTVLEQSIETTNNHVSITTSGPGTGSDSDSGISVSKTPIMKPGKPKADAKKVPKKPEEITPEN
HVEGTARLVTDTAEILSRLGGVELLQDTLGHVMPVSVQLPPNINLVKVPVPLNTTKYNSALDTNATMINS
FNKFPYPTQAEISWLTAAASKHPEEHIRIWFATQRLKHGISWSPEEVVEEARKKMFNGTIQSVPTITVLP
QLAPTQVTPQILQALPCQILGQTSVLVLTQVTSSTTVSCSPITLAVAGVTNHGQKRPLVTPQAAPEPKR
PHIAQVPEPPPVANPPLTPASDRKKTKEQIAHLKASFLQSQFPDDAEVYRLIEVTGLARSEIKKWFSDH
RYRCQRGIVHITSESLAKDQLAIAASRHGRTYHAYPDFAPQKFKEKTQGQVKILEDSFLKSSFTQAELE
RLRVETKLSRREIDSWFSERRKLRDSMEQAVLDSMSGKKGQDVGAPNGALSRLDQLSGAQLTSSLPSPS
PAIAKSQEQVHLLRSTFARTQWPTQEQYDQLAAKTGLVRTEIVRWFKENRCLLKTGTVKWMEQYQHQPMA
DDHGYDAVARKATKPMAESPKNGGDVVPQYYKDPKCLCEDLEKLVTRVKVGSEPAKDCLPAKPSEATSD
RSEGSSRDGQGSDENEESSVVDYVEVTVGEEDAISDRSDSWSQAAAEVSELAESDSDCVPAEAGQA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6229_h07.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:


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

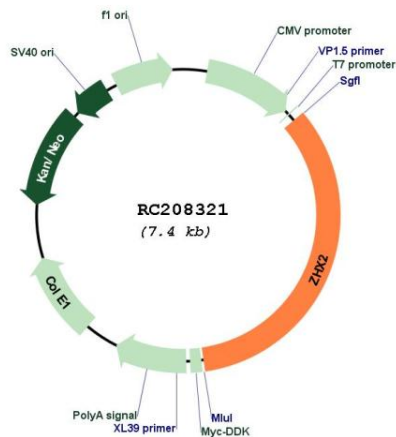
Domains: homeobox, zf-C2H2

Protein Families: Transcription Factors

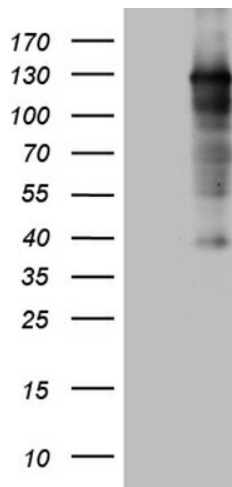
MW: 92.3 kDa

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]

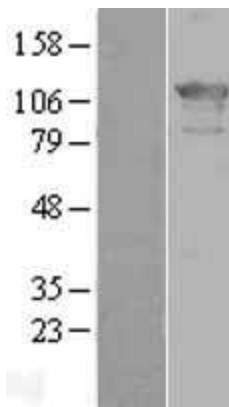
Product images:



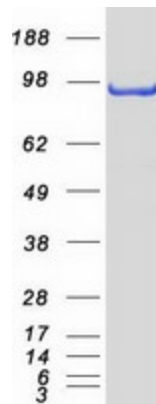
Circular map for RC208321



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ZHX2 (Cat# RC208321, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ZHX2 (Cat# [TA810637])(1:2000). Positive lysates [LY414909] (100ug) and [LC414909] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY414909]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208321 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ZHX2 protein (Cat# [TP308321]). The protein was produced from HEK293T cells transfected with ZHX2 cDNA clone (Cat# RC208321) using MegaTran 2.0 (Cat# [TT210002]).