

Product datasheet for **RG216886**

HMx2 (NM_005519) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	HMx2
Synonyms:	H6L; Nkx5-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG216886 representing NM_005519
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGCAGCAAAGAAGATGCGGGCAAGGGGTGTCCGGCGGCCGGTGGCGTCTCCAGCTTCACCATCCAGT
CCATCCTGGGCGGGGGCCCTCGGAGGCACCGCGGAGCCCGTGGCTGGCCAGCCAGGAAGCGCAGCCT
GTCCGTGTCTCGGAGGAGGAGGACCGGACGACGGCTGGAAGGCGCCCGCCTGCTTCTGCCAGACCAG
CACGGCCCTAAGGAGCAGGGCCCCAAGCACCATCCCCCATCCCTTTTCCTTGCTGGGTACCCCAAGG
GCAGCGGAGGCTCGGGCCCGGGCGGCTTGAGCGCACGCCTTTCTCTCTCCTTCGCACTCGGACTTTAA
AGAAGAGAAAGAGAGGCTCCTGCCCCGGGCTCGCCCTCGCCGGGGTCCGAGCGGCCGGGACGGCGGC
GCTGAGCGGCAGGCCGGCGCGCCAAGAAGAAGACGCGCACCGTCTTTTCGCGCAGCCAGGTGTACCAGC
TCGAGTCCACCTTCGACATGAAGCGCTACCTGAGCAGCTCGGAGCGCGCCTGCCTCGCCTCCAGCCTGCA
GCTCACGGAGACCCAGGTAAAGACTTGGTTCCAGAACC GCCGCAACAAGTGAAGCGGCAGCTCTCGGCT
GAGCTGGAGGCGGCCAATATGGCGCACGCGTGGCGCAGACTCTGGTGAGCATGCCGCTGGTGTTCGGG
ACAGTTCGCTGCTGCGCGTGCCGGTGCCGCGCTCGCTCGCCTTTCCGCGCCGCTCTACTACCCGGGAAG
CAACCTCTCGGCCTTACCTCTCTACAACCTATAACAAGCTCGACTAC

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



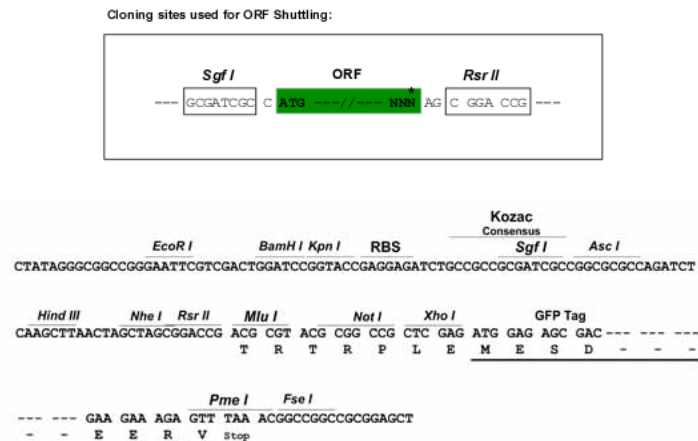
Protein Sequence: >RG216886 representing NM_005519
 Red=Cloning site Green=Tags(s)

MGSKEDAGKCPAAGGVSSFTIQSILGGGPSEAPREPVGWPARKRSLSVSSEEEPPDDGWKAPACFCPDQ
 HGPKEQGPKHHPPIPFPLGTPKSGSGPGLERTPFLSPSHSDFKEEKERLLPAGSPSPGSEPRDGG
 AERQAGAAKKKTRTVFSRSQVYQLESTFDMKRYLSSSERACASSLQLTETQVKTFQNRNKKWRQLSA
 ELEAANMAHASAQTLSMPLVFRDSSLRVPVPRSLAFAPLYYPGSNLSALPLYNLYNKLDY

SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_005519

ORF Size: 819 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_005519.1](#), [NP_005510.1](#)

RefSeq Size: 1628 bp

RefSeq ORF: 822 bp

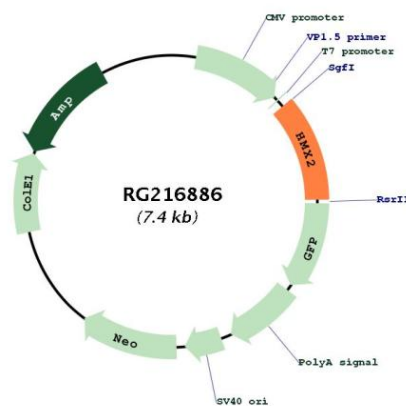
Locus ID: 3167

UniProt ID: [A2RU54](#)

Cytogenetics: 10q26.13

Gene Summary: The protein encoded by this gene is a member of the NKL homeobox family of transcription factors. Members in this family are of ancient origin and play an important role in organ development during embryogenesis. A related mouse protein plays a role in patterning of inner ear structures. In humans, variations in a region containing this gene have been associated with inner ear malformations, vestibular dysfunction, and hearing loss. [provided by RefSeq, Aug 2012]

Product images:



Circular map for RG216886