

Product datasheet for **MG223040**

Foxn4 (NM_148935) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Foxn4 (NM_148935) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Foxn4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG223040 representing NM_148935
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGATAGAAAGTGGCATTGGTCCAGAATGTCAGAAATGATCAGAAGCTCGGGGCACAGCCACCCTGCT
 CTCACAGGAATACAGGTTTCTGCCTCCCGTGGGTGACGACGACCTCCCTGGGGACCTTCAGTCGCTGTC
 CTGGCTCACGGCCGTGGACGTGCCTCGACTGCAGCAGATGGCAAATGGGCGGATAGACCTGGGCAGTTCA
 GGTGTGACACATCCACACCCAGGTGCCTGGTGGGACAGCAGACCTGCATGTGGGTGCGGCCCCACGTC
 CCCTGCTCCGCCGACCCAGACTGCCGTGGTCCCCAGGGGTGTGCTGGGCTTGAGCCCTATAGGCAACCA
 CAGAGCCAGCGCTGAGCAGATGAACCAGTTCCTGCAGGAGGCCAGGCATCATCGGGCTCCAGGAAATG
 CCACAGCTGTACTCCCAGCTACCCAAATCCCCTTCCCTCGCTTGGGGTCCCAGCAGTGCCCTCCTG
 CCGGCTCTATGGTTCTCGTTTTCGGCTCGGCCCTTCTACCCACAGGCCACGGGGCAATGCATGCGTC
 TCAGGAGCCACACCCAAACACTACCCAAAGCCATCTACTCCTACAGCTGTCTGATCGCCATGGCCTTG
 AAGAACAGCAAAACAGGCAGTTGCCCGTGAAGTACAGCTTACAGCTTATGAAGGAGCACTTCCCTACT
 TCAAGACAGCACCTGACGGCTGGAAGAATCCGTGAGGCACAACCTGTCCCTGAACAAGTCTTCGAGAA
 GGTGGAACAAGTCCAGCGCTCCTCACGCAAGGGTGCCTGTGGGCCCTGAACCTGGCTCGCATCGAC
 AAGATGGAGGAGGAGATGCACAAGTGGAAACGAAAGGACCTCGCTGCCATACCCGACGATGGCCAACC
 CTGAGGAGTTGGACAAGCTCATCTCAGACCGCCCGAAAGCTGCCGGCTCCTGGAAAACAGGAGAGCC
 TAAAGCCCCATGCTAACTATGCCACCACGGTGGCCATGGCCACAGCTGCCTGGCCATCTCCAACTC
 CCACCAAAGCCACTGATGACCTGTCCCTGCAGTCAGTGCCTCTGCACCACCAGCTCCAGCCCCAGGCAC
 ACCTGGCCCCAGACTCCCCGGCACCAGCAGACACCCACCTTCTCATGCCCTACCCAGTCTCAGCCCCAGG
 GCCTCTCCCGCAGCCAGCCATGGGTAGGGTTCCTGGGGACTTCCCAACATCAACAGTGACATGAACACA
 GAGGTGGACGCCCTGGACCCAGCATCATGGACTTCGCTCTACAGGGTAACCTGTGGGAAGAGATGAAGG
 AGGACAGCTTCAGCCTAGACAGCTGGAGGCTTTGGAGACTCCCCGCTTGGCTGCGACCTGGGAGCCCC
 AAGCCTGACCCCTGTCTCTGGCAACAGTGACCAGTCCCTCCCTGATGTGCAGGTGACAGGTCTCTATGCT
 GCCTACTCCACTGCCGACAGCGGTGTGGCCCCATCAGCGGCCAACTCTGCGCAGTACCTGGGTACACCAG
 GGAACAAGCCTATTGCTCTGCTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG223040 representing NM_148935
 Red=Cloning site Green=Tags(s)

MIESGIWSRMSEIRSSGSHHCSPQEYRFLPPVGGDDLPGDLQSLSWLTAVDVPRLLQPMANGRIDLGSS
 GVTHPHGALAGTADLHVGAAPRPLRRSQTAVVPRGVLGLSPIGNHRASAEQMNQFPAGGQASSGLQEM
 PQLYSPATQIPFPLPLGSQQCPPAGLYGSPFSARPSYPQAHGAMHASQEPHPKHYPKPIYSYSCLIAMAL
 KNSKTGSLPVSEIYSFMKEHFPYFKTAPDGWKNVSRHNLNLKCFEKVETKSSGSSRKGLWALNLARID
 KMEEEMHKWKRDLAAIHRSMANPEELDKLISDRPESRRPGKRGEKAPMLTHATTVAMAHSCLAISQL
 PPKPLMTLSLQSVPLHHQLQPQHLAPDSPAPAQTPPLHALPSLSPGPLPQPAMGRVPGDFLNINSDMNT
 EVDALDPSIMDFALQGNLWEEMKEDSFSLDTLEAFGDSPLGCDLGAAPSLTPVSGNSDQSFDPDQVTLGLYA
 AYSTAADGVAPSAANSAQYLGTGPNKPIALL

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_148935

ORF Size: 1563 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_148935.2](#), [NP_683737.2](#)

RefSeq Size: 2970 bp

RefSeq ORF: 1566 bp

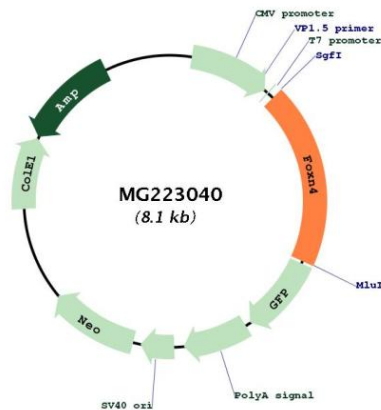
Locus ID: 116810

UniProt ID: [Q8K3Q3](#)

Cytogenetics: 5 F

Gene Summary:

Transcription factor essential for neural and some non-neural tissues development, such as retina and lung respectively. Binds to an 11-bp consensus sequence containing the invariant tetranucleotide 5'-ACGC-3'. During development of the central nervous system, is required to specify the amacrine and horizontal cell fates from multipotent retinal progenitors while suppressing the alternative photoreceptor cell fates through activating DLL4-NOTCH signaling. Also acts synergistically with ASCL1/MASH1 to activate DLL4-NOTCH signaling and drive commitment of p2 progenitors to the V2b interneuron fates during spinal cord neurogenesis. In development of non-neural tissues, plays an essential role in the specification of the atrioventricular canal and is indirectly required for patterning the distal airway during lung development.[UniProtKB/Swiss-Prot Function]

Product images:

Circular map for MG223040