

Product datasheet for **RG228244**

NKX1-2 (NM_001146340) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	NKX1-2
Synonyms:	bB238F13.2; C10orf121; NKX-1.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG228244 representing NM_001146340
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGGCATGGCAGGACGGCGGGGCAAGGCGGCTCCCTCCACCAAGATTCTTTCTGTCTGTCTGG
ACATCCTGGACCCACAGAAATTCACCCGCGCAGCGCTCCCTGCCGTGCGCCCGGCTCCCGGGAAGCCAG
GAAAAGTTTGGCGGAGGTCAAGCGGGGAAAGATGCCAGCTCCAGGGACCCTGTCCGACAGCTGGAGACC
CTGATGCTGCGGGCCAGGCGCCGCGCAGGCGTCCCCCTGGAGGGTCCGAGGCGGAAGAGGAGGAGG
ATGCGGAGGATCCGAGGAGGCGCGGCTGCGGGAGCGGGCTGCGCGCTTGTGCGGGGCTAGCGCGCTC
ACCTGACGCCCCGCGCGGGCATTGGCGTCTGGGAGCCCTGCGAGGACGGCGGGGCGGCCCTGTGAGG
TCCCCCGGGATCCCCGGCTCCCCGCGTCCAGGCGCGGCGCCTGGAGCCCACTGCGCCAAGCCGC
GGCGCGCGCACCGCCTTACCTACGAGCAGCTGGTGGCCTTGAGAAACAAGTTCCGGGCCACGCGCTA
CCTGTCAAGTGTGCGAGCGCCTGAACCTCGCGCTGTCTCTAGCCTCACCAGACGACAGGTCAAAATCTGG
TTCCAGAATCGCAGGACCAAGTGAAGAAGCAGAACC CGGTGCCAGCGCGCGGCGCAGGTGGGGGGTG
GCGCGCCCCAGCCAGGGGCGGCGGGGGCGGCGCGGCGGCGGCTCGGGGGGAGTCTTGGCCCTCCCGG
CACCGGCGCTCTGCACTTCCAGACTTCCCTCCTACTCCGCGGCAATGTCTCTTCCCGTCCGCCGCC
TCCTTCCCGCTGACGGCTGCCGCCCCGGGAGCCCTTTCGCGCGGTTCTTGGGCTTCTACCTGACCC
CCTTCTACGCCCCGCGTCTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >RG228244 representing NM_001146340
Red=Cloning site Green=Tags(s)

MLAWQDGGAKAAPSHHKISFSVLDILDLPQKFTRAALPAVRPAPREARKSLAEVEAGKDASSRDPVRQLET
PDAAGPGAGQASPLEGSEAEEDAEPPRRPRLRERARLLPGLARSPDAPAGALASGEPCEDEGGGGPVR
SPPGSPGSPRRRRLEPNCAPRRARTAFYEQLEVALENKFRATRYLSVCERLNLALSLSLTETQVKIW
FQNRRTKWKQNPAGDAAQVGGGAPQGAAGGGGGGGSGGSPGPPGTGALHFQTFPSYSAANVLFPSAA
SFPLTAAAPGSPFAPFLGPSYLPFYAPRL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



CTATAGGGCGGCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

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

HindIII NheI RsrII MluI NotI XhoI GFP Tag

T R T R P L E M E S D - - -

--- GAA GAA AGA GTT TAA ACGGCCGCCGCGGAGCT

- - E E R V Stop

ACCN: NM_001146340

ORF Size: 930 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_001146340.3](#)

RefSeq Size: 971 bp

RefSeq ORF: 933 bp

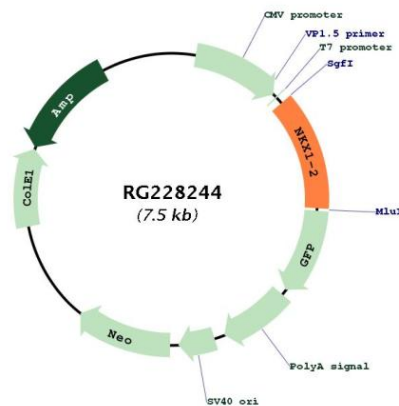
Locus ID: 390010

UniProt ID: [Q9UD57](#)

Cytogenetics: 10q26.13

Gene Summary: May function in cell specification, particularly in the CNS.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG228244