

Product datasheet for **RG218459**

NKAIN1 (NM_024522) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	NKAIN1
Synonyms:	FAM77C
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG218459 representing NM_024522
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAGTCATCCTGGGCATCTTTGGCACCGTGCAGTACCGCTCCCGGTACCTCATCCTGTATGCAGCCT
GGCTGGTGCTCTGGGTTGGCTGGAATGCATTTATCATCTGCTTCTACTTGGAGGTTGGACAGCTGTCCCA
GGACCGGGACTTCATCATGACCTTCAACACATCCCTGCACCGCTCCTGGTGGATGGAGAATGGCCAGGC
TGCTGGTGACACCTGTTCTGAACCTCCGCTGGCTCTGGAGGACCACCATGTCATCTCTGCACTGGCT
GCCTGCTTGACTACCCCTACATTGAAGCCCTCAGCAGCGCCCTGCAGATCTCCTGGCACTGTTCCGGCTT
CGTGTTCCGCTGCTACGTGAGCAAAGTGTTCTGGAGGAGGAGGACAGCTTTGACTTCATCGGCGGCTTT
GACTCCTACGATACCAGGCGCCCCAGAAGACGTCGCATTTACAGCTGCAGCCTCTGTACACGTCGGGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG218459 representing NM_024522
Red=Cloning site Green=Tags(s)

MAVILGIFGTVQYRSRYLILYAAWLVLWVGWNAFIICFYLEVQLSQDRDFIMTFNTSLHRSWWMENGP
CLVTPVLNSRLALEDHHVISVTGCLLDYPYIEALSSALQIFLALFGVFACVYSKVFLEEDSDFDIGGF
DSYGYQAPQKTSHLQLQLYTS

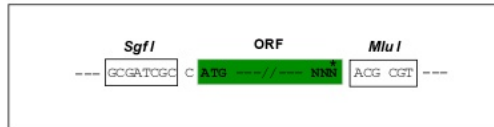
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



Cloning Scheme:

Cloning sites used for ORF Shutting:



Cloning sites used for ORF Shutting:

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CTATAGGGCGGCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT

HindIII NheI RsrII MluI NotI XhoI GFP Tag

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

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

PmeI FseI

--- GAA GAA AGA GTT TAA ACGCCGGCCGCGGAGCT

- - E E R V Stop

ACCN: NM_024522

ORF Size: 489 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_024522.1](#), [NP_078798.1](#)

RefSeq Size: 2493 bp
 RefSeq ORF: 624 bp
 Locus ID: 79570

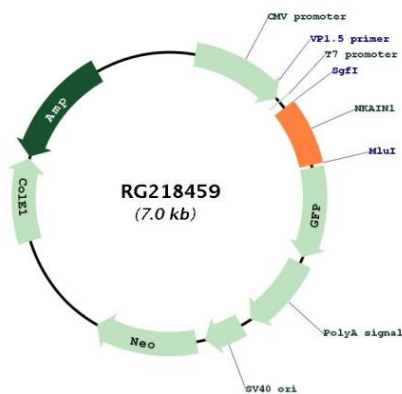
UniProt ID: [Q4KMZ8](#)

Cytogenetics: 1p35.2

Protein Families: Transmembrane

Gene Summary: NKAIN1 is a member of a family of mammalian proteins with similarity to Drosophila Nkain and interacts with the beta subunit of Na,K-ATPase (ATP1B1; MIM 182330) (Gorokhova et al., 2007 [PubMed 17606467]).[supplied by OMIM, Jun 2009]

Product images:



Circular map for RG218459