

Product datasheet for **RC228648**

Neurofascin (NFASC) (NM_001160332) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Neurofascin (NFASC) (NM_001160332) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NFASC
Synonyms:	NEDCPMD; NF; NRCAML
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC228648 representing NM_001160332 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

ATGGCCAGGCAGCCACCGCCGCTGGGTCCATGCAGCCTTCTCCTCTGCCTCCTCAGTCTTGGCGGAG
CCATCGAAATTCCTATGGATCTGACGCAGCCGCAACCATCACCAAGCAGTCAGCGAAGGATCACATCGT
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CCACCAACATCCTGGGCAAAGCTGAAAACCAAGTCCGCCTGGAGGTCAAAGACCCACCAGGATCTACCG
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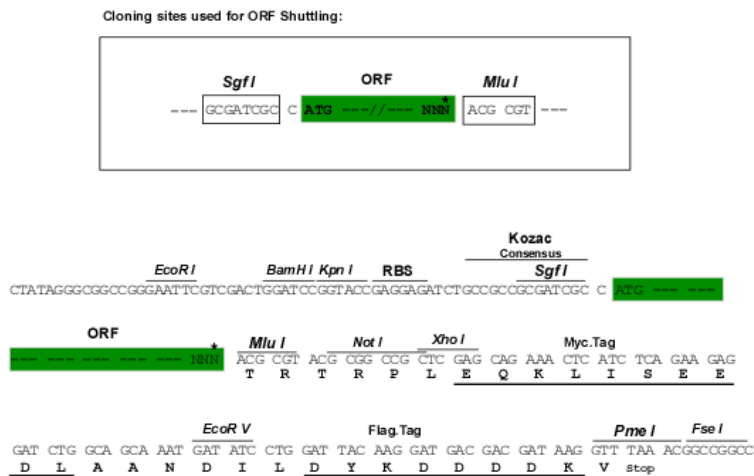
Protein Sequence: >RC228648 representing NM_001160332
 Red=Cloning site Green=Tags(s)

MARQPPPPWVHAAFLCLLSLGGAI EIPMDLTQPPTITKQSAKDHI VDPDRNILIECEAKGNPAPSFHWT
 RNSRFFNIAKDRVSMRRRSGTLVIDFRSGRPEEYEGEYQCFARNKFGTALSNRIRLQVSKSPLWPKEN
 LDPVVVQEGAPLTLQCNPPPGPLSPVIFWSSSMEPITQDKRVSQGHNGDLYFSNVMLQDMQTDYSCNAR
 FHFTHTIQQKNPFTLKVLTNHPYNDSSLRNHPDMYSARGVAERTPSFMYPQGTASSQMVLRGMDLLECI
 ASGVPTPDIAWYKGGDLPSDKAKFENFNKALRITNVSEEDSGEYFCLASNKMGSI RHTISVRVKAAPYW
 LDPEKNLILAPGEDGRLVCRANGNPKPTVQWMVNGEPLQSAPPNPNREVAGDTIIFRDTQISSRAVYQCN
 TSNEHGYLLANAFVSVLDVPPRMLSPRNQLIRVILYNRTRLDCPFFGSPIPTLRWFKNGQGSNLDGGNYH
 VYENGSL EIKMIRKEDQGIYTCVATNILGKAENQVRLEVKDPTRIYRMPEDQVARRGTTVQLECRVKHDP
 SLKLTVSWLKDDEPLYIGNRMKKEDDSL TIFGVAERDQGSYTCVASTELDQDLAKAYLTVLGRPDRPRDL
 ELTDLAERSVRLTWIPGDANNSPITDYVVQFEEDQFQPGVWHDH SKYPGSVNSAVLRLSPYVNYQFRVIA
 INEVGSSHPSLPSERYRTSGAPPE SNP GDVKGEGTRKNNMEITWTPMNATSAFGPNLRYIVKRRRETRE
 AWNNVTWGSRYVVGQTPVYVPEYIRVQAENDFGKGPEPE SVIGYSGEDYPRAAPTEVKVRVMNSTAISL
 QWNRVYS DTVQGLREYRAYYWRESSLLKNLWVSQKRQQASFPGDRLRGVVSRLFPYSNYKLEMVVVNGR
 GDGPRSETKEFTTPEGVPSAPRRFRVRQP NLETINLEWDHPEHPNGIMIGYTLKYVAFNGTKVKGQIVEN
 FSPNQTKFTVQRTDPVSRYRFTLSARTQVGSGEAVTEESPAPPNEATPTAAYTNNQADIATQGWFI GLMC
 AIALLVLLIVCFIKRSRGGKYPVREKKDVPLGPEDPK EEDGSF DYSD EDNKPLQGSQTSLDGTIKQQE
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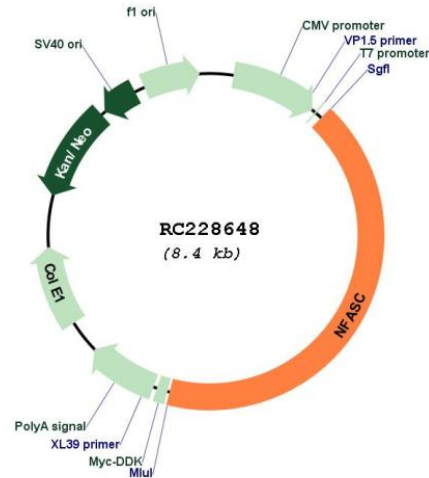
Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001160332

ORF Size: 3522 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_001160332.2](#)

RefSeq ORF: 3525 bp

Locus ID: 23114

UniProt ID: [O94856](#)

Cytogenetics: 1q32.1

Protein Families: Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs)

MW: 132.11 kDa

Gene Summary: This gene encodes an L1 family immunoglobulin cell adhesion molecule with multiple IGcam and fibronectin domains. The protein functions in neurite outgrowth, neurite fasciculation, and organization of the axon initial segment (AIS) and nodes of Ranvier on axons during early development. Both the AIS and nodes of Ranvier contain high densities of voltage-gated Na⁺ (Nav) channels which are clustered by interactions with cytoskeletal and scaffolding proteins including this protein, gliomedin, ankyrin 3 (ankyrin-G), and betaIV spectrin. This protein links the AIS extracellular matrix to the intracellular cytoskeleton. This gene undergoes extensive alternative splicing, and the full-length nature of some variants has not been determined. [provided by RefSeq, May 2009]