

## Product datasheet for RC214686

### Neurofascin (NFASC) (NM\_015090) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Neurofascin (NFASC) (NM_015090) 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:	>RC214686 representing NM_015090 Red=Cloning site Blue=ORF Green=Tags(s)

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**Protein Sequence:** >RC214686 representing NM\_015090  
Red=Cloning site Green=Tags(s)

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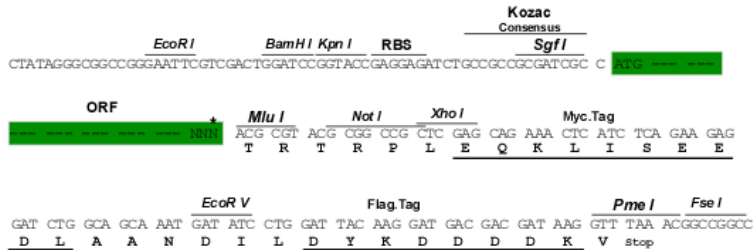
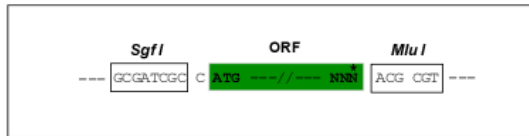
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L D P V V V Q E G A P L T L Q C N P P P G L P S P V I F W M S S S M E P I T Q D K R V S Q G H N G D L Y F S N V M L Q D M Q T D Y S C N A R
F H F T H T I Q Q K N P F T L K V L T N H P Y N D S S L R N H P D M Y S A R G V A E R T P S F M Y P Q G T A S S Q M V L R G M D L L E C I
A S G V P T P D I A W Y K K G D L P S D K A K F E N F N K A L R I T N V S E E D S G E Y F C L A S N K M G S I R H T I S V R V K A A P Y W
L D E P K N L I L A P G E D G R L V C R A N G N P K P T V Q W M V N G E P L Q S A P P N P N R E V A G D T I I F R D T Q I S S R A V Y Q C N
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V Y E N G S L E I K M I R K E D Q G I Y T C V A T N I L G K A E N Q V R L E V K D P T R I Y R M P E D Q V A R R G T T V Q L E C R V K H D P
S L K L T V S W L K D D E P L Y I G N R M K K E D S L T I F G V A E R D Q G S Y T C V A S T E L D Q D L A K A Y L T V L G R P D R P R D L
E L T D L A E R S V R L T W I P G D A N N S P I T D Y V V Q F E E D Q F Q P G V W H D H S K Y P G S V N S A V L R L S P Y V N Y Q F R V I A
I N E V G S S H P S L P S E R Y R T S G A P P E S N P G V K G E G T R K N N M E I T W T P M N A T S A F G P N L R Y I V K W R R R E T R E
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Q W N R V Y S D T V Q G Q L R E Y R A Y Y W R E S S L L K N L W V S Q K R Q Q A S F P G D R L R G V V S R L F P Y S N Y K L E M V V V N G R
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F S P N Q T K F T V Q R T D P V S R Y R F T L S A R T Q V G S G E A V T E E S P A P P N E A Y T N N Q A D I A T Q G W F I G L M C A I A L L
V L I L L I V C F I K R S R G G K Y P V R E K K D V P L G P E D P K E E D G S F D Y S D E D N K P L Q G S Q T S L D G T I K Q Q E S D D S L
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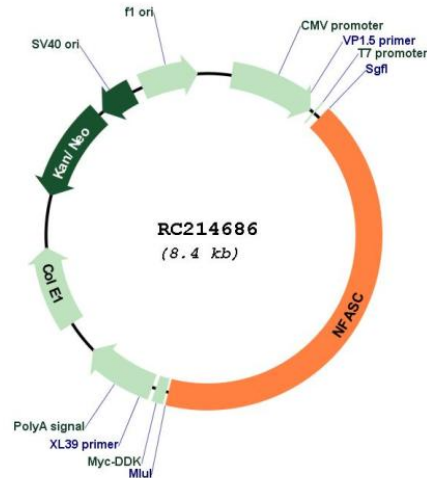
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_015090

**ORF Size:** 3507 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\\_015090.4](#)

**RefSeq Size:** 10138 bp

**RefSeq ORF:** 3510 bp

**Locus ID:** 23114

**UniProt ID:** [O94856](#)

**Cytogenetics:** 1q32.1

<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Cell adhesion molecules (CAMs)
<b>MW:</b>	131.7 kDa
<b>Gene Summary:</b>	<p>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<sup>+</sup> (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]</p>