

Product datasheet for MR220935

Nfasc (NM_001160317) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Nfasc (NM_001160317) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Nfasc
Synonyms: AA387016; D430023G06Rik; mKIAA0756; NF
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR220935 representing NM_001160317
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCAGGCAGCAGGCGCCACCCTGGGTCCACATAGCCCTCATCCTCTTCTCCTCAGCCTCGGAGGGG
 CCATCGAGATCCGATGGACCTGACCCAACCCCAACTATCACCAAGCAGTCCGTGAAGGACCACATCGT
 GGACCCTCGAGATAACATCCTGATTGAATGTGAAGCTAAAGGCAACCCCGCCCCAGTTTCACTGGACT
 CGCAACAGCAGATTCTTCAACATTGCCAAGGACCCACGGGTGTCCATGAGGAGGAGATCTGGGACCTTGG
 TGATCGACTTCCGAGTGGTGGGCGGCCTGAGGAATACGAAGGGGAGTACCAGTGCTTTGCCCGGAACAA
 ATTTGGCACTGCACTTAGCAACCGCATCCGCTGCAGGTGTCAAATCTCCCTGTGGCCCAAGGAAAAAC
 CTAGACCCCGTCGTGGTTCAAGAGGGTGGCCCTTGACACTACAGTGCAACCCCCACCCGGCTCCCGT
 CCCCCTCATCTTCTGGATGAGCAGTCCATGGAGCCATCACCCAGGACAAGCGTGTCTCCAGGGTCA
 CAACGGGACCTGTACTTCTCCAACGTCATGCTGCAGGACATGCAGACCGACTACAGTGCACCGCGC
 TTTCACTTCACCCACACCATTACGAGAAGAACCCTTCAACCTCAAGTCTCACCAACAACCCCTATA
 ATGACTCGTCTTAAGAAACCACCTGACATATATAGTGCCCGAGGAGTTGCAGAAAGAAGCGCCAGCTT
 CATGTATCCCCAGGGCACATCGAGCAGTCAGATGGTTCTCCGTGGCATGGACCTGCTGTTGAATGCATT
 GCCTCTGGCGTCCAACACCAGACATTGCATGGTACAAGAAAGGTGGGGACCTCCCATCTAACAAGGCCA
 AGTTCGAGAACTTAATAAGGCTCTGCGCATACCAATGTCTCTGAAGAGGACTCTGGGAGTATTTCTG
 CCTGGCTCCAACAAGATGGGCAGCATCCGGCACACGATCTCGGTGAGAGTAAAGGCTGCTCCATACTGG
 CTGGATGAGCCCAAGAACCTGATCCTGGCTCCTGGGAAGATGGGAGGCTGGTATGCCGAGCCAATGGGA
 ACCCGAAGCCGACCGTGCAGTGGATGGTGAATGGAGAGCCTTTACAATCGGCACCACCAATCCCAACCG
 TGAGGTAGCTGGAGACACTATCATCTCCGGGATACTCAGATCAGCAGCAGGGCAGTGTACCAATGTAAT
 ACATCCAATGAACATGGTACCTGCTGGCCAATGCCTTCGTGAGGTTAGATGTACCCCTCGGATGC
 TGCTGCCCACCAAGCTCATCAGGGTATCCTTTATAACCGGACACGGCTGGACTGTCCGTTCTTTGG
 GTCTCCATCCCAACACTCCGATGGTTTAAAGATGGGCAAGGAAGCAACCTGGATGGCGGTAACCTACCAC
 GTCTACGAAAACGGCAGTCTAGAAATCAAGATGATTGCAAGAGGACCAAGGCATCTACACCTGTGTGG



[View online >](#)

CCACCAACATCCTGGGCAAAGCCGAAAATCAAGTCCGCCTGGAGGTCAAAGACCCACCAGGATCTACAG
GATGCCCGAGGACCAGGTGGCCAAGAGGGGCACCACGGTGCAGCTGGAGTGCCGCGTGAACATGACCCC
TCCTTGAAGCTCACAGTCTCCTGGCTGAAGGACGATGAGCCACTCTACATTGAAACAGGATGAAGAAGG
AAGATGACTCCCTGACGATCTTCGGAGTGGCAGAGCGGGACCAGGGCAGTTACACGTGTATGGCCAGCAC
CGAGCTGGACCAGGACCTGGCAAAGGCCTACCTCACTGTTCTAGGGCGACCAGACCAGCCAGGGACCTG
GAGTCACTGACCTGGCTGAGAGGAGTGTGAGGCTGACCTGGATCCCAGGGGATGACAACAACAGCCCTA
TCACAGACTACGTGCTTCAGTTTGAAGAGGACCAGTTCCAACCAGGGGTGTGCATGACCACTCCAGGTT
CCCAGGCAGCGTCAACTCAGCCGTCCTCCATCTGTCCCATATGTCAACTACCAATTGAGAGTCATCGCT
GTCAACGAGGTTGGGAGCAGCCACCCAGCCTTCCATCCGAGCGGTACCGAACCAAGTGGGGCACCCCTG
AATCTAATCCCAGTGATGTGAAGGGCGAAGGGACAAGAAAGAACAATATGGAGATCACGTGGACGCTAT
GAATGCTACCTCTGCCTTGGCCCAACCTACGCTACATTGTCAAGTGGCGACGGAGAGAGACCCGAGAG
ACTTGGAAACAATGTCACAGTGTGGGCTCTCGCTACGTGGTGGGCAGACGCTGTCTACGTTCCCTATG
AGATCCGAGTCCAGGCTGAAAATGACTTTGGGAAAGGCCCGAGCCTGACACCATCATTGGGTACTCCGG
AGAAGATTATCCCAGGGCTGCGCCCACTGAAGTTAAAATCCGAGTCTGAACAGCACAGCCATCAGCCTT
CAGTGGAAACCGAGTCTACTCTGACACGGTCCAGGGCCAGCTCAGAGAGTATCGAGCTTACTACTGGAGGG
AAAGCAGTTTGCTGAAGAACCTGTGGGTGTCTCAGAAGAGACAGCAGGCCAGCTTCCCTGGTGACCGTCC
CCGGGGCGTGGTGGCCCGCTGTCCCCTACAGTAACTACAAGCTGGAGATGGTGGTGGTCAATGGGAGA
GGTGACGGGCCTCGAAGTGAAACCAAGGAATTCACCACCCAGAAGGAGTACCCAGTGCCCCAGGCGGT
TCAGAGTCCGACAGCCCAACCTGGAGACCATCAACCTGGAGTGGGACCACCCAGAGCACCCCAACGGAAT
CCTGATTGGATACATCCTCAGATACGTGCCCTTAATGGAACCAAACTGGGAAAGCAGATGGTGGAAAAC
TTCTCTCCAATCAGACCAAGTTCTCTGTGCAGAGAGCAGACCCAGTGTGCGGTTACCGCTTCTCCCTCA
GTGCCAGGACACAGGTGGGCTCTGGAGAAGCAGCCACAGAGGAGTCCCCAGCACCTCAAATGAAGCTAC
TCCAATGACAGTTACACCAATAACCAGGCAGACATCGCCACCCAGGGCTGGTTCAATCGGGCTCATGTGT
GCCATTGCCCTTCTGGTGTGATCCTTCTCATCGTCTGCTTCATCAAGAGGAGTCGAGGTGGCAAGTACC
CAGTGGCGGAAAAGAAGGATGTCCCTTGGTCTGAAGACCCCAAGAAGAAGATGGCTCATTTGACTA
CAGTGATGAGGACAACAAGCCCTGCAGGGCAGCCAGACATCTCTGGATGGCACCATCAAGCAGCAGGAG
AGCGATGACAGCCTGGTGGACTATGGCGAAGGCGGCGAGGGCCAGTTCAATGAAGATGGCTCCTTTATTG
GCCAGTACACTGTCAAAAAGGACAAGGAGGAAACGGAGGGCAATGAGAGCTCAGAGGCCACATCACCAGT
CAATGCCATCTATTCCCTTGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

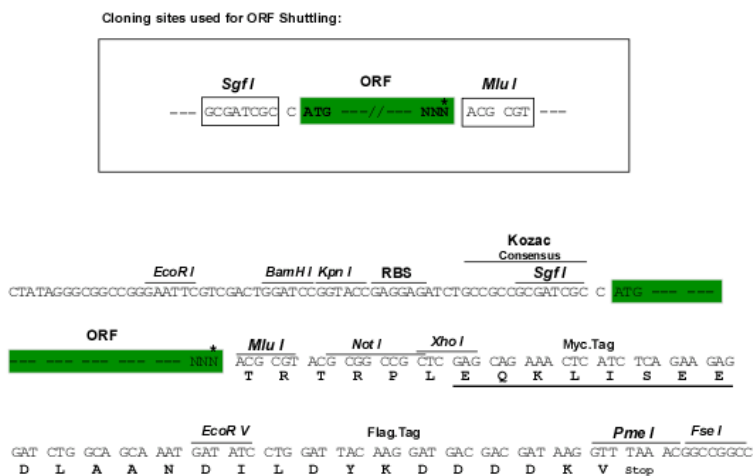
Protein Sequence: >MR220935 representing NM_001160317
 Red=Cloning site Green=Tags(s)

```
MARQQAPPWVHIALILFLLSLGGAIEIPMDLTQPPTITKQSVKDHI V D P R D N I L I E C E A K G N P A P S F H W T
RNSRFFNIAKDP RVSMRRRSGLTVIDFRSGRPEEYEGEYQCFARNKFGTALS NRIRLQVSKSPLWPKEN
LDPVVVQEGAPLTLQCNPPPGLPSPVIFWSSSMEPITQDKRVSQGHNGDLYFSNVMLQDMQTDYSCNAR
FHFTHTIQQKNPFTLKVLTNNPYNDSSLRNHPDIYSARGVAERTPSFMYPQGTSSSQMVL R G M D L L L E C I
ASGVPTPDIAWYKGGDLPSNKAKFENFNKALRITNVSEEDSGEYFCLASNKMG SIRHTI SVRVKAAPYW
LDPEKNLILAPGEDGRLVCRANGNPKPTVQWVMNGEPLQSAPPNPNREVAGDTIIFRDTQISSRAVYQCN
TSNEHG Y L L A N A F V S V L D V P P R M L S A R N Q L I R V I L Y N R T R L D C P F F G S P I P T L R W F K N G Q G S N L D G G N Y H
VYENGSL 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 K R G T T V Q L E C R V K H D P
SLKLT V S W L K D D E P L Y I G N R M K K E D D S L T I F G V A E R D Q G S Y T C M 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
ELTDLAERSVRLTWIPGDDNNSPITDYVVQFEEDQFQPGVWHDHSRFPGSVNSAVLHLSPYVNYQFRVIA
VNEVGSSHPSPLSERYRTSGAPPE SNP SD 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
T W N N V T W G S R Y V V G Q T P V Y V P Y E I R V Q A E N D F G K G P E P D T I I G Y S G E D Y P R A A P T E V K I R V L N S T A I S L
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 S Q K R Q Q A S F P G D R P R G V V A R L F P Y S N Y K L E M V V V N G R
G D G P R S E T K E F T T P E G V P S A P R R F R V R Q P N L E T I N L E W D H P E H P N G I L I G Y I L R Y V P F N G T K L G K Q M V E N
F S P N Q T K F S V Q R A D P V S R Y F S L S A R T Q V G S G E A A T E S P A P P N E A T P T A 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 V D Y G E G G E Q F N E D G S F I G Q Y T V K K D K E E T E G N E S S E A T S P V N A I Y S L A
```

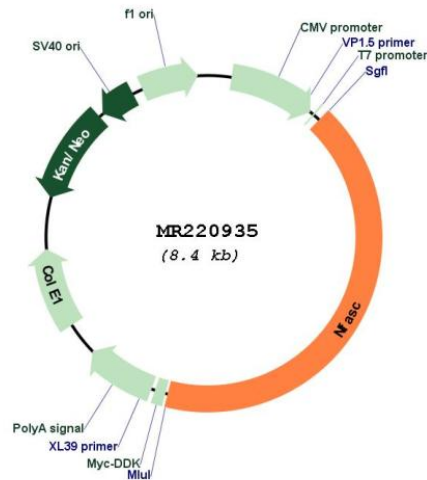
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001160317

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_001160317.1](#), [NP_001153789.1](#)

RefSeq Size: 9597 bp

RefSeq ORF: 3525 bp

Locus ID: 269116

Cytogenetics: 1 57.42 cM

MW: 132.7 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]