

Product datasheet for **RN217559**

Nfasc (NM_001160314) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Nfasc (NM_001160314) Rat Untagged Clone
Tag: Tag Free
Symbol: Nfasc
Synonyms: NF
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN217559 representing NM_001160314
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAGGCAGCAGGCCACCCTGGGTCCACGTAGCCCTCATCTCTCTCCTCAGCCTCGGAGGGG
CCATTGAGATCCGATGGATCCAAGCATTAGAATGAGCTGACCCAACCCCAACGATCACCAAGCAGTC
GGTGAAGGACCACATCGTGGACCCCGAGATAACATCCTGATTGAATGTGAAGCTAAAGGGAACCCCGCC
CCCAGTTTCCACTGGACTCGCAACAGCAGGTTCTCAACATTGCCAAGGACCCACGGGTGTCCATGAGGA
GGAGGTCTGGGACCTTGGTGTGACTCGACTCCGCAGTGGTGGCGGGCTGAGGAGTACGAAGGGGAGTACCA
GTGCTTTGCCCGAACAATTCGGCACAGCTCTTAGCAACCGCATCCGCCTGCAGGTGTCCAATCTCCC
CTGTGGCCCAAGGAAAACCTAGACCCCGTCTGTGGTTCAAGAGGGTGCCCCCTTAACCCTGCAGTGAACC
CCCCACCTGGCCTCCCATCCCCGTCTTCTGGATGAGCAGCTCCATGGAGCCCATCACCCAGGACAA
GCGTGTCTCCAGGGTACAACGGGGACCTGTACTTCTCAACGTCATGCTGCAGGACATGCAGACCGAC
TACAGCTGCAATGCACGCTTCCACTTCACCCACACCATTCAGCAGAAGAATCCCTCACCTCAAAGTCC
TCACCACCGAGGAGTTGCGAAAGAACACCTAGCTTCATGTATCCCCAGGGCAGTCAAGCAGTCAGAT
GGTACTGCGCGGCATGGACCTGCTGCTGGAGTGCATTGCCTCTGGGGTCCCAACACCAGATATTGCATGG
TACAAGAAAGGTGGGACCTCCCATCTGACAAGGCCAAGTTCGAGAATTTAACAAGGCTCTGCGCATCA
CCAATGTCTCTGAAGAGGACTCTGGGGAGTATTTCTGCCTGGCCTCCAACAAGATGGGCAGCATCCGGCA
CACGATCTCGGTGAGAGTAAAGGCTGCCCCATACTGGCTGGATGAGCCCAAGAACTTGATCTCTGGCTCCT
GGTGAAGATGGGAGGCTGGTGTGTCGAGCCAATGGGAACCCGAAGCCGACCGTCCAGTGGCTGGTGAATG
GAGACCTTTGCAATCGGCACCACCCAACCCCAACCGTGAGGTGGCCGGAGACACTATCATCTCCGGGA
CACTCAGATCAGCAGCAGGGCAGTGTACCAGTGAACACATCCAACGAACATGGCTACCTGCTGGCCAAT
GCCTTCGTGAGCGTATTAGATGTACCCCTCGGATGCTGTCTCCCGGAACCGCTCATCAGGGTGTATCC
TTTACAACCGGACGCGACTGGACTGTCCGTTCTTTGGGTCTCCATTCCAACACTCCGATGGTTTAAAGAA
TGGGCAAGGAAGCAACCTGGATGGTGGTAACTACCACGCTACGAAAATGGCAGCCTGGAATCAAGATG
ATTCGCAAGAGGACCAAGGCATCTACACCTGTGTGGCCACCAACATCCTGGGAAAAGCTGAAAATCAAG



TCCGCCTGGAGGTCAAAGACCCACCAGGATCTACAGGATGCCTGAAGACCAGGTGGCCAAGAGGGGCAC
CACAGTGCAGCTGGAGTGCCGTGTGAAGCATGACCCCTCCTTGAAACTCACAGTCTCCTGGCTGAAGGAT
GACGAGCCACTCTACATTGGAACAGGATGAAAAAGGAAGATGACTCCCTGACCATCTTCGGAGTGGCAG
AGCGGGACCAAGGCAGTTACACGTGCATGGCCAGCACCAGCTGGACCAGGACCTGGCAAAGGCCTACCT
CACTGTTCTAGCTGATCAGGCCACTCCGACTAACCGTTTGGCTGCCCTGCCCAAAGGGCGGCCAGACCGA
CCCAGGGACTGGAGCTACTGACCTGGCGAAAGGAGTGTGAGGCTGACCTGGATCCCGGGGATGATA
ACAACAGTCCCATCACAGACTACGTTGTCCAGTTTGAAGAGGACCAGTTCCAGCCAGGAGTCTGGCATGA
CCTCACTCAAGTTCCAGGCAGTGTCAACTCAGCCGTCTCCATCTGTCCCGTATGTCAACTATCAGTTC
CGAGTCATCGCTGTCAACGAGGTTGGGAGCAGCCACCCAGCCTTCCATCCGAGCGGTACCGAACAAAGCG
GGGCACCCCTGAATCCAACCCAGTGTGTGAAGGGCGAAGGGACACGAAAAACAATATGGAGATCAC
ATGGACGCTATGAATGTACTCCGCCTTGGCCCAACCTGCGCTACATTGTCAAGTGGCGACGGAGA
GAAACCCGAGAGACTTGGAAACAATGTCACCGTGTGGGCTCTCGTATGTGGTGGGGCAGACCCCTGTCT
ACGTACCTATGAGATCCGAGTCCAGGTGAAAATGACTTTGGGAAAGGCCCGGAGCCTGAAACCGTCAT
TGGGTA CTGGGGGAAGATTTACCCAGTCCCCAGGCGTTT CAGAGTCCGACAGCCCACTGGAGACC
ATCAACCTGGAATGGGATCACCCAGAGCACCCCAACGGGATCCTGATTGGATACAGCTCAGATACGTGC
CCTTTAATGGAACCAAAGTGGGAAAGCAGATGGTGGAAAACCTTCTCTCCCAATCAGACCAAGTTCTCGGT
GCAGAGAGCAGACCCCGTGTCCCGTTACCGCTTCTCCCTCAGTGCAGGACGCAGGTGGGCTCTGGAGAA
GCAGCCACGGAGGAGTCCCAACACCTCCAATGAAGCTACTCCAAGTGCAGCTCCTCCACATTGCCCC
CGACTACCGTGGGTACCACAGGCCTTGTGAGCAGTACTGATGCTACTGCCCTTGTGCCACCAGTGAAGC
CACAACAGTTCATCATCCCAACGGTGGTACCTACCACCGTCCGACCACCATTGCCACAACACTACTACA
ACCACTGCCGCCGCCACCACCCTACCACCAGGAGTCCCTCCCACTACCACCACTGGGACTAAGATTC
ACGAAACCGCCCCGACGAGCAGTCCATTTGGAACGTACGGTGTCTCCCAACAGTAAATGGGCCAACAT
CACCTGGAAGCACAATTTAGGCCTGGAAGTACTTTGTGGTTGAGTACATCGACAGCAACCATACGAAA
AAAAGTGTCCCTGTTAAGGCCCAAGCCAGCCATACAGCTGACAGACCTTTTCCCGGGATGACGTACA
CGTTGCGGGTGTATTCCCGGGACAACGAGGGCATCAGCAGTACCGTCATCACCTTTATGACCAGTACAGC
TTACACCAACAACAGACTGACATCGCCACCCAGGGCTGGTTCATCGGGCTCATGTGTGCCATTGCCCTT
CTGGTGTGATCTGTGCTGCTGCTTATCAAGAGGAGTCTGGCGGCAAGTACCCAGTGGCAGAGAAA
AGAAGGATGTCCCTTGGGCCCTGAAGACCCCAAGAAGAAGATGGTTCATTTGACTACAGTACAGGAGGA
CAACAAGCCCCTGCAGGGCAGCCAGACATCTCTGGACGGCACCATCAAGCAGCAGGAGAGTACGACAGC
CTAGTGGACTACGGCGAGGGTGGCGAGGGCCAGTTCAACGAAGATGGCTCCTTTATTGGCCAGTACTGT
TCAGAAAGGACAAGGAGGAGACCGAGGGCAATGAGAGCTCAGAGGCCACATCTCCAGTCAATGCCATCTA
TTCCTGGCC**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

Sgfl-Mlul

ACCN:

NM_001160314

Insert Size:

3723 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation:

Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.

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_001160314.1](#), [NP_001153786.1](#)

RefSeq Size: 9825 bp

RefSeq ORF: 3723 bp

Locus ID: 116690

UniProt ID: [P97685](#)

Cytogenetics: 13q13

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]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). This isoform lacks the third fibronectin type 3 (FNIII) repeat and includes the mucin-like domain. Isoform 1 is also known as NF186, as described by Davis et al. (PMID: 8947556). **Sequence Note:** This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.