

## Product datasheet for **RG228652**

### Neurofascin (NFASC) (NM\_001160331) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Neurofascin (NFASC) (NM_001160331) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Neurofascin
Synonyms:	NEDCPMD; NF; NRCAML
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG228652 representing NM_001160331 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCAGGCAGCCACCGCCGCTGGGTCCATGCAGCCTTCCTCCTCTGCCTCCTCAGTCTTGCGGGAG  
CCATCGAAATTCCTATGGATCTGACGCAGCCGCAACCATCACCAGCAGTCAGCGAAGGATCACATCGT  
GGACCCCGTGATAACATCCTGATTGAGTGTGAAGCAAAGGGAACCTGCCCCAGCTTCCACTGGACA  
CGAAACAGCAGATTCTTCAACATCGCAAGGACCCCGGGTGTCCATGAGGAGGAGTCTGGGACCTGG  
TGATTGACTTCCGCAGTGGCGGGCGCCGAGGAATATGAGGGGAATATCAGTGCTTCGCCGCAACAA  
ATTTGGCAGGCCCTGTCCAATAGGATCCGCCTGCAGGTGTCAAATCTCCTCTGTGGCCCAAGGAAAC  
CTAGACCTGTGCTGGTCCAAGAGGGCGCTCCTTTGACGCTCCAGTGCAACCCCGCCTGGACTTCCAT  
CCCCGGTCATCTTCTGGATGAGCAGCTCCATGGAGCCATCACCAGCAACACGTGTCTCTCAGGGCCA  
TAACGGAGACCTAATTCTCCAACGTGATGCTGCAGGACATGCAGACCGACTACAGTTGTAACGCCCGC  
TTCCACTTCAACACACCATCCAGCAGAAGAACCCTTTCACCCTCAAGGTCTCACCACCCCTTATA  
ATGACTCGTCCTAAGAAACCACCTGACATGTACAGTGCCCGAGGAGTGCAGAAAGAACCAAGCTT  
CATGTATCCCCAGGGCACCGGAGCAGCCAGATGGTGTCTCGTGGCATGGACCTCCTGCTGGAATGCATC  
GCCTCCGGGTCCCAACACAGACATCGCATGGTACAAGAAAGGTGGGGACCTCCATCTGATAAGGCCA  
AGTTTGAGAACTTAATAAGGCCCTGCGTATCACAAATGTCTCTGAGGAAGACTCCGGGGAGTATTTCTG  
CCTGGCCTCCAACAAGATGGGCAGCATCCGGCACACGATCTCGGTGAGAGTAAAGGCTGCTCCCTACTGG  
CTGGACGAACCAAGAACCTTATTCTGGCTCCTGGCGAGGATGGGAGACTGGTGTGTCGAGCCAATGGAA  
ACCCAAACCCACTGTCCAGTGGATGGTGAATGGGGAACCTTGAATCGGCACCACCTAACCCAAACCG  
TGAGGTGGCCGGAGACACCATCATCTCCGGGACACCCAGATCAGCAGCAGGGCTGTGTACCAGTGAAC  
ACCTCAAACGAGCATGGTACCTGCTGGCAACGCCTTTGTCAGTGTGCTGGATGTGCCCTCGGATGC  
TGTCGCCCCGAACAGCTCATTGAGTGATTCTTTACAACCGGACGCGCTGGACTGCCCTTCTTTGG  
GTCTCCATCCCCACACTGCGATGGTTAAGAATGGGCAAGGAAGCAACCTGGATGGTGGCAACTACCAT



[View online »](#)

GTTTATGAGAACGGCAGTCTGGAATTAAGATGATCCGCAAAGAGGACCAGGGCATCTACACCTGTGTCG  
CCACCAACATCCTGGGCAAAGCTGAAAACCAAGTCCGCCTGGAGGTCAAAGACCCACCAGGATCTACCG  
GATGCCCGAGGACCAGGTGGCCAGAAGGGGCACCACGGTGCAGCTGGAGTGTCCGGTGAAGCAGACCC  
TCCCTGAAACTCACCGTCTCCTGGCTGAAGGATGACGAGCCGCTCTATATTGAAACAGGATGAAGAAGG  
AAGACGACTCCCTGACCATCTTTGGGGTGGCAGAGCGGGACCAGGGCAGTTACACGTGTGTGCCAGCAC  
CGAGCTAGACCAAGACCTGGCCAAGGCCTACCTCACCGTGTAGCTGATCAGGCCACTCCAACCTAACCGT  
TTGGCTGCCCTGCCCAAAGGACGGCCAGACCCGGCCCGGACCTGGAGCTGACCGACCTGGCCGAGAGGA  
GGTGGCGCTGACCTGGATCCCCGGGGATGCTAACAAACAGCCCATCACAGACTACGTCCGTCAGTTTGA  
AGAAGACCAGTTCCAACCTGGGGTCTGGCATGACCATTCCAAGTACCCCGCAGCGTTAACTCAGCCGTC  
CTCCGGCTGTCCCGTATGTCAACTACCAGTTCCTGTGTCATTGCCATCAACGAGGTTGGGAGCAGCCACC  
CCAGCCTCCCATCCGAGCGCTACCGAACAGTGGAGCACCCCGAGTCCAATCCTGGTACGTGAAGGG  
AGAGGGGACCAGAAAGAACAACATGGAGATCACGTGGACGCCATGAATGCCACCTCGGCCCTTGGCCCC  
AACCTGCGCTACATTGTCAAGTGGAGGCGGAGAGACTCGAGAGGCTGGAACAACGTACAGTGTGGG  
GCTCTCGTACGTGGTGGGCAGACCCAGTCTACGTGCCCTATGAGATCCGAGTCCAGGCTGAAAATGA  
CTTCGGGAAGGGCCCTGAGCCAGAGTCCGTATCGGTTACTCCGAGAAGATTATCCAGGGCTGCGCCC  
ACTGAAGTTAAAGTCCGAGTCATGAACAGCACAGCCATCAGCCTTCAAGTGAACCCGCTACTCCGACA  
CGGTCCAGGGCCAGCTCAGAGAGTACCGAGCCTACTACTGGAGGAGAGCAGCTTGTGAAGAACCTGTG  
GGTGTCTCAGAAGAGACAGCAAGCCAGCTTCCCTGGTACCGCCTCCGTGGCGTGGTGTCCCGCCTTTC  
CCCTACAGTAACTACAAGCTGGAGATGGTTGTGGTCAATGGGAGAGGTGATGGGCCTCGCAGTGAGACCA  
AGGAGTTCACCACCCCGAAGGAGTACCCAGTCCCTAGGCGTTTCCGAGTCCGGCAGCCCAACCTGGA  
GACAATCAACCTGGAATGGGATCATCCTGAGCATCCAAATGGGATCATGATTGGATACACTCTCAAATAT  
GTGGCCTTTAACGGGACCAAAGTAGGAAAGCAGATAGTGGAAAACCTCTCTCCAATCAGACCAAGTTCA  
CGGTGCAAAGAACGGACCCCGTGTACGCTACCGCTTTACCTCAGCGCCAGGACGAGGTGGGCTCTGG  
GGAAGCCGTACAGAGGAGTACCAGCACCCCGAATGAAGTACTCCAACCCGAGCTTACACCAACAAC  
CAAGCGGACATCGCCACCCAGGGCTGGTTCATTGGGCTTATGTGCGCCATCGCCCTCCTGGTGTGATCC  
TGCTCATCGTCTGTTTCAAGAGGAGTCCGCGCGCAAGTACCCAGTACGAGAAAAGAAGGATGTTCC  
CCTTGGCCCTGAAGACCCCAAGGAAGAGGATGGCTCATTTGACTATAGTGATGAGGACAACAAGCCCTG  
CAGGGCAGTCAGACATCTCTGGACGGCACCATCAAGCAGCAGGAGAGTGACGACAGCCTGGTGGACTATG  
GCGAGGGTGGCGAGGGTCAGTTCAATGAAGACGGCTCCTTCATCGGCCAGTACACGGTCAAAAAGGACAA  
GGAGAAAACAGAGGGCAACGAAAGCTCAGAGGCCACGTACCTGTCAATGCTATCTACTCTGGCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG228652 representing NM\_001160331  
Red=Cloning site Green=Tags(s)

```

MARQPPPPWVHAAFLCLLSLGGAI EIPMDLTQPPTITKQSAKDHI VDPDRNILIECEAKGNPAPSFHWT
RNSRFFNIAKDRVSMRRRSGTLVIDFRSGRPEEYEGEYQCFARNKFGTALSNRIRLQVSKSPLWPKEN
LDPVVVQEGAPLTLQCNPPPLPSPVIFWSSSMEPITQDKRVSQGHNGDLYFSNVMLQDMQTDYSCNAR
FHFTHTIQQKNPFTLKVLTNHPYNDSSLRNHPDMYSARGVAERTPSFMYPQGTASSQMVL RGM DLLLECI
ASGVPTPDIAWYKGGDLPSDKAKFENFNKALRITNVSEEDSGEYFCLASNKMG SIRHTI SVRVKAAPYW
LDEPKNILILAPGEDGRLVCRANGNPKPTVQWMVNGEPLQSAPPNPNREVAGDTIIFRDTQISSRAVYQCN
TSNEHYLLANAFVSVL DVPPRMLSPRNQLIRVILYNRTRLDCPFFGSP IPTLRWFKNGQGSNL DGGNYH
VYENGSL EIKMIRKEDQGIYTCVATNILGKAENQVRLEVKDPTRIYRMPEDQVARRGTTVQLECRVKHDP
SLKLT VSWLKDDEPLYIGNRMKKEDDSL TIFGVAERDQGSYTCVASTELDQDLAKAYLTVLADQATPTNR
LAALPKGRPDRPDEL TDLAERSVRLTWIPGDANNSPITDYVVQFEEDQFQPGVWHDH SKYPGSVNSAV
LRLSPYVNYQFRVIAINEVGSSHP LPSERYRTSGAPPESNPGDVKGEGTRKNMMEITWTPMNATS AFGP
NLRYIVKWRRRETREAWNNTVWGSRYVVGQTPVYVPYEIRVQAENDFGKGPEPE SVIGSGEDY PRAAP
TEVKVRVMNSTAISLQWNRVYS DTVQGGQLREYRAYYWRESSLLKNLWVSQKRQQASFPGDRLRGVVSRLF
PYSNYKLEMVVVNGRGDGRSETKEFTTPEGVPSAPRRFRVRQPNLETINLEWDHPEHPNGIMIGYTLKY
VAFNGTKV GKQIVENFSPNQTKFTVQRTDPVSR YRFTLSARTQVGSGEAVTEESPAPPNEATPTAAYTNN
QADIATQGWFI GLMCAIALLVILLIVCFIKRSRGGKYPVREKKDVPLGPEDPK EEDGSFDYSDENKPL
QGSQTSLDGTIKQESD DSV DYGEGEGGQFNEDGSF IGQYTVKKDKEETEGNESSEATSPVNAIYSLA
    
```

TRTRPLE - GFP Tag - V

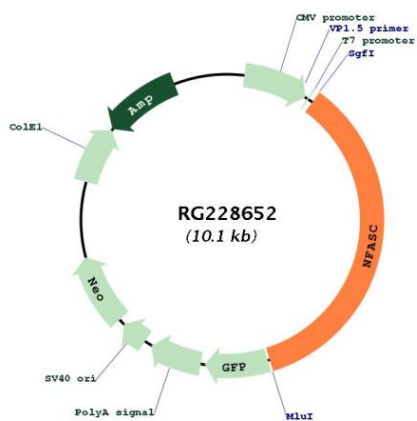
**Restriction Sites:** SgfI-MluI  
**Cloning Scheme:**



**ACCN:** NM\_001160331  
**ORF Size:** 3567 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_001160331.1</a> , <a href="#">NP_001153803.1</a>
<b>RefSeq Size:</b>	9960 bp
<b>RefSeq ORF:</b>	3570 bp
<b>Locus ID:</b>	23114
<b>UniProt ID:</b>	<a href="#">O94856</a>
<b>Cytogenetics:</b>	1q32.1
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Cell adhesion molecules (CAMs)
<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>

Product images:



Circular map for RG228652